

REPORT
OF THE
INDIAN FAMINE COMMISSION,



CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
1908

Price annas 14 or 1s. 3d.

TABLE OF CONTENTS.

	PAGE.
PART I.—PRELIMINARY.	
Historical retrospect	1
Scope of the enquiry	3
Appreciation of the character and results of the relief measures	4
Scheme of the Report	8
PART II.—THE ADMINISTRATION OF RELIEF. THE FAMINE CODES.	
SECTION I.—Standing preparations	9
SECTION II.—Lessons of experience	11
SECTION III.—Danger signals	14
SECTION IV.—Order of relief measures	15
SECTION V.—Class of works	20
SECTION VI.—Number of works and special tests	22
SECTION VII.—Control of Works	25
SECTION VIII.—Organization on works	27
SECTION IX.—System on works	29
SECTION X.—Tasks	31
SECTION XI.—System of measurement and payment	33
SECTION XII.—Wage scale	35
SECTION XIII.—Gratuitous relief	43
SECTION XIV.—Rains policy	47
SECTION XV.—Closure of relief	51
SECTION XVI.—Aboriginal tribes	ib.
SECTION XVII.—Immigration from Native States	53
SECTION XVIII.—Medical and sanitary	56
SECTION XIX.—Mortality	59
SECTION XX.—Preservation of cattle	69
SECTION XXI.—Railways	74
SECTION XXII.—Weavers	75
SECTION XXIII.—Orphans	77
SECTION XXIV.—Suspensions and remissions of land revenue	78
SECTION XXV.—Advances by Government	83
PART III.—PROTECTIVE.	
SECTION I.—Introductory	86
SECTION II.—Pressure of the land revenue	ib.
SECTION III.—Suspensions and remissions of revenue	89
SECTION IV.—Agricultural banks	94
SECTION V.—Advances by Government	99
SECTION VI.—Indebtedness in the Bombay Presidency	102
SECTION VII.—Agricultural development	108
Conclusion	109
APPENDICES	111—114
INDEX	115

PART I.

PRELIMINARY.

1. The territorial rule in India of the East India Company extended in point of time from the Administration of Mr. Hastings, the first Governor-General, to the Administration of Lord Canning, the first Viceroy. During this period of about ninety years the Indian Peninsula suffered, in one part or another, from twelve famines and four severe scarcities: but no attempt was made in those early years of our dominion to grapple with the famine question, or to construct any system of famine relief. When a famine occurred, the efforts made to relieve distress were usually on a small scale, disconnected and spasmodic. A little employment was offered to the able-bodied, and a little gratuitous relief was distributed to the helpless from scanty funds collected from the charitably disposed. But there was no systematized and sustained action, and but little expenditure of public money. Amid the wars and distractions and financial difficulties that attended the building up of an Empire, the claims of famine relief attracted small attention.

2. Since the transfer of the government from the East India Company to the Crown, there have been seven famines and one severe scarcity in various provinces of British India. The first of these was caused by the failure of the spring crops of 1861; but it affected a comparatively small tract of country; and it rests in official memory—it has faded out of the people's minds—only because poor-houses were then first used as a means of relief, and because it was made the occasion of the first famine enquiry instituted by any Government in India.

3. That enquiry had but little educative effect on the public mind for, when the great famine of 1866, commonly known as the Orissa famine,* supervened, the principles and methods of relief administration were still unsettled and unformed.

The Orissa famine may be regarded as the turning point in the history of Indian famines; for, in the course of the enquiry conducted into it by the Commission presided over by the late Sir George Campbell, the foundations were laid of the humane policy, which the Government of India have now adopted. The Report of that Commission was not immediately fruitful, so far as the formulation of a system of relief was concerned; but it effectually called attention to the responsibilities which rested on the Government in famine years.

4. Accordingly, when the failure of the rains of 1868 caused intense famine in Rajputana, and severe scarcity with local famine in parts of the North-Western Provinces, the Punjab and other regions, unprecedented action was taken by the Government to relieve distress. The humane principle of saving every life was now first enunciated, and a departure was made from the hitherto accepted policy of leaving to public charity the duty of providing funds for gratuitous relief. The total expenditure of Government money on relief in 1869 (46 lakhs) may

* It affected parts of Madras, Bengal and Northern India also.

not appear large in the light of later experience; but a distinct advance was made in both the principles and practice of famine relief.

5. When the monsoon rains of 1873 failed over a great part of North Behar, and to a less extent in other regions, the Government at once took note of the situation. The situation, however, was not really so alarming as it at first appeared; the failure of the crops was complete only over a small area. But the dangers of the time were exaggerated, as much by public apprehension lest the Orissa misfortune should be repeated, as by official ignorance of the precise statistical facts. In the end provision in excess of the need* was made to meet the emergency, but a great principle was finally asserted; and methods of relief administration were devised during the Behar famine, upon which subsequent experience has only improved.

6. If, in the matter of expenditure, the pendulum swung its full arc in the Behar famine, the inevitable reaction followed when the really great famine of 1876—78 burst upon Madras and Bombay; and later upon the North-Western Provinces and Oudh, and the Punjab. In this famine relief was to a large extent insufficient, and to a large extent imperfectly organized; the insufficiency being largely due to the inability of private trade, hampered by want of railways and communications, to supply the demand for food. The mortality was, in consequence, extremely great. A recognition of all these facts led to the appointment of General Strachey's Famine Commission, whose enquiries for the first time reduced to system the administration of famine relief, and whose report has powerfully influenced for good agrarian and administrative reform in India during the last twenty years.

7. The labours of the Commission of 1880 were of two kinds; on the one hand, they formulated general principles for the proper treatment of famines; and, on the other, they suggested particular measures of a preventive or protective character. In regard to the general principles, with which we are immediately concerned, the Commission of 1880 recognized to the full the obligation imposed on the State to offer to the necessitous the means of relief in times of famine. But it was the cardinal principle of their policy that this relief should be so administered, as not to check the growth of thrift and self-reliance among the people, or to impair the structure of society which, resting as it does in India upon the moral obligation of mutual assistance, is admirably adapted for common effort against a common misfortune. "The great object," they said, "of saving life and giving protection from extreme suffering may not only be as well secured, but in fact will be far better secured, if proper care be taken to prevent the abuse and demoralization which all experience shows to be the consequence of ill-directed and excessive distribution of charitable relief."†

8. In this spirit the Provisional Famine Code was framed, and the modern policy of famine relief administration was determined. That policy was first brought to a crucial test in the famine of 1896-97, and the very elaborate enquiry into its results conducted by the Commission of 1898 completely vindicated the principles laid down in 1880, and

* Including the importation by State agency of nearly 500,000 tons of rice from Burma.

† Paragraphs 107 and 108 of the Report of 1880.

demonstrated the success which a system of relief based upon them could achieve. Wherever there was failure, it was due not so much to defects in the system of relief as to defects in the administration of it.

9. But, while confirming the principles enunciated by the Commission of 1880, the Commission of 1898 departed from them in recommending a more liberal wage and a freer extension of gratuitous relief. Moreover, their repeated warnings against any measures of relief involving an element of risk were, in effect, an invitation to recede from the strictness, or, as we prefer to call it, the prudent boldness, of the former policy.

10. Before these recommendations had been fully considered and incorporated into the Provincial Famine Codes, the drought of 1899 occurred; and Local Governments were compelled to face another great famine, without a settled policy, and in nearly all cases with their Famine Codes still unrevised. This led to uncertainty and oscillation in the application and guidance of measures of relief; and into the results of this uncertainty, as well as into the whole question of famine administration, we have now been instructed to enquire.

11. We are directed to examine, in the light of the fresh experience now gained, the administration of relief in all its branches, the cost of the recent operations, and the extent of the mortality; to consider what new problems have arisen, and how far events confirm the wisdom, or suggest the amendment, of the recommendations made by the last Commission. Our mandate also requires us to deal, in their broad aspects, with the questions of the collection of the land revenue and the grant of advances to agriculturists; to investigate the existing practice with regard to loans to cultivators in the several provinces; and to advise as to the necessity for revised instructions on these important subjects. Finally, we are permitted to record any recommendations or opinions, which may be of use in the anticipation or treatment of future famines.

12. Our mandate, though wide, is however, limited by two important reservations. In the first place, all questions of a technical character concerning the programmes of public works, which existed in the several provinces at the outbreak of the famine, as well as concerning the utility of the works constructed, are excluded from our investigation: these questions have been reserved for separate enquiry. In the second place, we are prevented from making any enquiry into relief administration in Native States, although we are instructed to report on "the extent, nature, and general causes of immigration from Native States into British districts; its effect upon relief measures in them; how it was dealt with; and what better arrangements for concerted action between British and Native authorities can be devised." The prohibition against making enquiries into the relief administration in Native States has disabled us from dealing thoroughly with the question of immigration into British districts. On such a very difficult and complex question it is impossible to give full advice without knowing all the facts and hearing both sides of the case.

13. Our instructions permitted us to deal with the famine administration in every part of the British India. But relief was conducted on so small a scale in Madras, Bengal and the North-Western Provinces, that the lessons to be learned in these provinces were few and not significant. The points involved could be studied on a larger scale elsewhere.

Besides, our Commission includes members who had, each in his own province, either actually directed, or become acquainted with the direction of, the relief operations in question. We therefore did not think it necessary to visit these provinces, or to summon from them any witnesses for oral examination, but we have issued interrogatories and we have examined the official reports and opinions, which have been placed at our disposal. Our local enquiries have, thus, been confined to the Central Provinces, Berar, Bombay, Ajmer and the Delhi Division of the Punjab, in which tracts alone the famine was extensive or severe; and to the experience gained in these tracts we shall principally refer in the course of our report.

14. The area affected by the recent famine, at the time of maximum pressure, in the five British provinces, to which our enquiries extended, was roughly 175,000 square miles, and the population of the area was 25 millions according to the census of 1891. Including the less afflicted parts of British India, the area and the population affected were, in round numbers, 189,000 square miles and 28 millions respectively.

15. The circumstances of the famine of 1899-1900 are in many ways peculiar. Both in its material manifestations and in the attitude of the people, it differs from preceding famines. Nor was its intensity uniform over the whole tract affected. Over large areas the conditions were rather those of scarcity than of famine; but in both scarcity and famine areas the difficulties were aggravated by the fact that the failure of the crops was attended, in many parts of the affected provinces, by a failure of the water-supply, and also by a failure of fodder, which in parts of Bombay was practically complete. This shortness of the water-supply and dearth of fodder told heavily on men and cattle, and enormously increased the difficulties of administration. Moreover, in the districts bordering on Native States immigration added very greatly to the anxieties of the local officers.

16. But the most distinctive feature of the recent famine from the administrative point of view was the numbers of persons who came on State relief. These far exceeded the numbers of any previous famine. We compare in the following table the population affected and the number of units relieved during the two recent famines in the provinces specified :—

Province.	1896-97.*		1899-1900.		Variation per cent. in 1899-1900 of population of affected tract.	Variation per cent. in 1899-1900 of millions of units relieved.
	Population of affected tract.	Millions of units relieved.	Population of affected tract.	Millions of units relieved.		
Central Provinces	6,462,000	158	10,418,450	556	+61	+252
Berar	1,183,000	5	2,837,040	107	+145	+2,040
Bombay	6,865,000	119	†9,776,503	385	+42	+224
Ajmer . . . . .	...	...	542,358	38	...	...
Punjab	3,157,000	22·4	‡1,496,323	49	—53	—119

* These figures are taken from the table on page 202 of the Report of the Famine Commission of 1898.

† These are the figures given by the Bombay Government. The census figures for 1891 of the whole districts are, roughly, 12½ millions.

‡ These are the figures given for the population of the area affected. The total population in the districts affected was 3,358,000.

The increase in units relieved was, thus, out of all proportion to the increase in numbers inhabiting affected tracts. In certain regions an increase of relief last year, as compared with 1897, was to be expected, seeing that the later famine followed so soon after the earlier one, and that both had been preceded in most provinces by a series of bad years. But, allowing for these considerations, we still regard the increase shown as very remarkable and beyond probable expectation. We are by no means prepared to accept the view that the number of persons relieved is the only or proper measure of the pressure of a famine; because it is obvious that these numbers may be affected by many considerations, such as the attitude of the people, or the laxity or stringency of the terms on which relief is administered.

17. On a review of the evidence then in existence the Famine Commission of 1880 estimated that 15 per cent. of the population affected was the maximum number likely to be in receipt of relief in the worst months; and that about 7 or 8 per cent. was the average number likely to require relief continuously for the space of a year. The Commission of 1898 pointed out that these proportions had been largely exceeded in certain areas in 1897. But a much greater excess has been recorded over larger areas, and for longer periods, in the recent famine, particularly in the Central Provinces. The following table shows the proportion of the population seeking relief at different periods:—

Province.	Percentage of total number relieved on population of area affected.				
	End of December 1899.	End of March 1900.	End of May 1900.	Beginning of August 1900.	Beginning of September 1900.
Central Provinces *	14.50	18.70	22.12	22.28	17.89
Berar	8.8	13.4	15.7	12.8	6.5
Bombay	5.24	13.03	12.28	16.44	12.6
Ajmer	20.8	18.3	26.7	16.2	10.1
Punjab	7.27	13.20	10.5	9.9	2.4

18. In the Betul district of the Central Provinces the astonishing proportion of 20.35 per cent. of the total district population were in receipt of relief from the end of October 1899; that is, from a time when, in other famines, only paupers set free by the contraction of private charity had to be dealt with. From the middle of November 1899 to the middle of September 1900 the percentage never fell below 24.36; for many weeks it was over 30, and for two months it was over 40, per cent. The figures for the Raipur district give even more astounding results; in the end of July 1900 the enormous proportion of 44.61 per cent. of the population were on relief; while a few days later the number of kitchens in this district was 2,718, at which daily meals were given to 663,558 persons, or 42 per cent. of the total population. Simultaneously

* The percentages are calculated on the population shown as affected at the several periods in the returns submitted to us by the Local Government. Calculated on the total population affected at the time of greatest pressure (i.e., 10,418,450), the percentages would be—

End of December 1899	11.20	End of May 1900	18.84
End of March 1900	15.11	Beginning of August 1900	22.28
Beginning of September 1900			17.89

in the adjacent district of Bilaspur, in which the crop failure is shown to have been practically the same as in Raipur, only 17·3 per cent. of the population affected were in receipt of relief. Facts like these impress us with the importance of the personal equation in famine administration.

19. High percentages—though not so high as those of the Central Provinces—were shown elsewhere. In the Buldana district of Berar for over six months about 25 per cent. of the population were in receipt of relief; but during a considerable part of the time the numbers were influenced by immigration from Hyderabad. In Bombay the percentages reached these high figures only in Gujarat during the rains, and in Ahmednagar and Sholapur, where the numbers were largely swollen by immigrants. In Ajmer the figures were high, but it was the second year of continuous distress, and there was undoubtedly much immigration. In the Hissar district of the Punjab the figures were high for six months, but the district had suffered from a series of bad years.

20. Another distinctive feature of the recent famine is the steady and unbroken rise in most provinces in the numbers relieved. In other famines the harvesting of the spring crops has led to the permanent or temporary departure of large numbers from the works; but in the recent famine the *rabi* harvest had no effect whatever, except in the Punjab, on the numbers on relief, which continued steadily to rise. Again, in other famines, on the break of the rains, the people were quick to resume their ordinary avocations; but in the recent famine the numbers relieved, particularly in the Central Provinces, instead of falling, on the break of the monsoon, continued to rise, and reached their maximum during the rains, after the demand for agricultural labour had set in.

Statement showing the total number of persons relieved at different periods.

Date.*	Central Provinces.	Berar.	Bombay.	Ajmer.	Punjab.	Total.
1	2	3	4	5	6	7
28th October 1899 . . .	385,231	33,249	130,296	80,557	59,143	688,476
25th November 1899 . . .	768,568	79,760	264,003	88,367	71,059	1,271,757
23rd December 1899 . . .	1,167,701	239,097	529,083	113,290	108,823	2,157,994
20th January 1900 . . .	1,459,695	306,366	790,681	91,922	151,442	2,800,106
17th February 1900 . . .	1,437,922	317,171	1,067,745	103,319	219,042	3,145,199
31st March 1900 . . .	1,574,623	363,541	1,259,043	100,139	197,589	3,494,935
28th April 1900 . . .	1,776,058	396,643	1,308,432	134,785	170,874	3,786,792
26th May 1900 . . .	1,962,987	456,311	1,185,847	134,761	157,335	3,897,241
30th June 1900 . . .	1,934,178	508,422	1,329,840	151,099	171,878	4,095,417
28th July 1900 . . .	2,295,010	537,747	1,486,998	104,732	180,663	4,605,150
18th August 1900 . . .	2,251,753	231,201	1,213,203	70,542	99,802	3,866,501
29th September 1900 . . .	1,118,110	188,057	837,802	29,017	29,468	2,202,454
27th October 1900 . . .	323,690	101,397	404,103	626	593	830,409
24th November 1900 . . .	873	12,463	215,439	248	...	229,023

* The figures are given in some provinces for slightly different dates to those shown in this column. The figures of the nearest date have in such cases been taken.

21. We have carefully considered these figures in conjunction with the recent agrarian history of the districts, and the incident of immigration; and we are of opinion that they cannot be taken as a measure of the distress without very great reservations. In certain districts, as we shall have occasion to point out, people in sore need of relief were denied it in the early stages of the famine, owing to defective administration: but in the main, and taking the famine period as a whole, the relief distributed was excessive. We have no doubt that the excess is to be accounted for by an imperfect enforcement of tests on relief works, by a too ready admission to gratuitous relief and by a greater readiness on the people's part to accept relief owing to the demoralizing influences of the preceding famine. The general position in the Central Provinces was described by the Chief Commissioner in February 1900 as follows: "Taught by their recent experience in 1896-97 the people looked from the first all too willingly to Government for relief, and the officers were urgent to anticipate distress." The same readiness to take relief was evident elsewhere. The failure of the *rabi* and *mahua* crops, which in some localities was complete, no doubt accounts to some extent for the numbers on the works from March onwards in most provinces; but the main cause was the rush for charity, which unbraced the administration, resulting in a laxity of tests, that made the charity still more attractive and the cause of much demoralization.

22. Reserving the question of mortality during the famine for full treatment in the second part of the report, we desire here to notice the cost of the operations. We find that in the provinces which we visited (the expenditure in the other three provinces was small being less than five lakhs of rupees) the following expenditure has been incurred:—

Province.	Expenditure incurred on works.	Incidence per unit relieved on works.	Expenditure incurred in gratuitous relief.	Incidence per unit gratuitously relieved.	Total expenditure.	Incidence per unit relieved.
	₹	A. P.	₹	A. P.	₹	A. P.
Central Provinces	2,69,39,859	1 8	1,67,66,856	0 10	4,37,06,715	1 3
Berar . .	89,59,258	2 1	21,98,964	0 11	1,11,58,222	1 8
Bombay . .	2,77,50,767	1 9	98,25,698	1 1	3,75,76,465	1 6
Ajmer . .	28,73,580	1 9·3	6,42,166	0 10·1	35,15,696	1 5
Punjab . .	31,42,594	1 7·1	8,95,675	0 9·7	40,38,269	1 3
TOTAL .	6,96,66,008	1 9	3,03,29,859	0 11	9,99,95,867	1 4

We fear that even these high figures will be found to have understated the actual expenditure. Advances have been made to the extent of more than one and three-quarter crores of rupees, a large proportion of which will be irrecoverable; and suspensions of revenue have been made to the amount of two crores of rupees, a large portion of which will have to be remitted. Making allowances for losses of revenue in other departments, we think that this famine will in the end have cost the State not

less than fifteen crores of rupees or ten million pounds sterling. This expenditure far exceeds that incurred in any previous famine. We do not for a moment advocate a departure from the humane policy of famine relief laid down by the Government of India; but experience has shown that the object in view can be attained at a moderate cost and with little demoralization, if prudence and foresight be duly exercised, and if means be properly adjusted to ends.

23. Such, then, in broad outline are the circumstances with which we have to deal. In examining them we shall look to the past mainly with the object of extracting from it lessons for guidance in future struggles. Our aim will be to re-state the principles by which alone famine relief on a great scale can be successfully administered. In so doing we shall not ignore the peculiarities of local circumstances, or attempt to fetter the discretion, which Local Governments should always exercise within the limitations of accepted principle. In this spirit we now proceed to trace the course of a famine from its start; to indicate the dispositions by which it should be faced, the measures by which it should be met, and the tactical errors which should be avoided in combating it. We shall illustrate our advice or warnings by examples drawn from the experience of last year; and we shall close our report by discussing certain questions and making recommendations, which bear upon the prevention of famine in the future.



सत्यमेव जयते

PART II.

THE ADMINISTRATION OF RELIEF. THE FAMINE CODES.

SECTION I.—*Standing Preparations.*

24. Recent experience has shown that no part of India, if unprotected by irrigation, can be considered free from the danger of a deficient rainfall, and the consequent failure in the harvest, which a short rainfall entails. A large part of the Central Provinces was not long ago regarded as immune from famine, and the possibility that Gujarat would be desolated by drought and hunger was not foreseen. Nor was the occurrence of two great famines within so short a period anticipated in any quarter. The unexpected, however, happened, and found the arrangements in most provinces incomplete. The first danger, then, of a practical kind to which the experience of the late famine points is the danger of unpreparedness. Against this danger the safeguards are—

- (1) an efficient system of intelligence;
- (2) effective programmes of relief works;
- (3) reserves of establishment;
- (4) reserves of tools and plant.

25. *Systems of intelligence.*—The Famine Commission of 1880 commented unfavourably on the character of the information regarding agricultural matters, and the means of collecting it, which were at the time available to Local Governments. Since then matters have greatly improved both in regard to the quality and quantity of statistical information collected and the agencies employed in collecting and recording it. In consequence of this improvement early estimates of the degree of anticipated crop failure were got out in 1899, and the various Administrations were warned in time of the coming pressure.

26. So far as the subordinate grades of the Intelligence Department are concerned, we have few recommendations to make. We consider it of urgent importance in Bombay that the village accountant should be placed under the supervision of the Circle Inspector, who in his turn should be brought more immediately under the control of the district authorities, and we would add that all statistical information regarding the district should go through the Collector's office and be compiled and collated there under the Collector's supervision. For example, the mortality statistics in Bombay are now sent direct from the *mámlatdár* to the sanitary authorities, without passing through the Collector's hands. The mortality statistics are the gauge of distress as well as of disease, and the present Bombay system thus keeps the gauge out of the hands of the Collector. We also take this opportunity of insisting on the advantages, already recognised in the rules of most provinces, of co-ordinating the information received and of constantly revising it to meet the requirements of practical administration. In order that this important work may be duly done, we consider that it is necessary to strengthen district establishments, both in actual numbers and by the

introduction of Inspectors (*kánúngos*) who have received an agricultural training.

27. *Programmes of works.*—In no province were well considered programmes of public or village works ready at the beginning of the famine. The rapidity with which this famine followed on the last is, no doubt, one great reason for this want of preparedness; another explanation is the failure to recognise in advance the importance of village works and the necessity of having proper programmes of them. Whatever be the explanation, the fact remains that the programmes were not ready; and many of the difficulties met with later on were connected with this fact. As, however, the whole subject of the programmes has been reserved for separate enquiry, it is only necessary for us to consider their place in the scheme of relief, and the means to secure that they shall be complete and that the officers concerned shall be ready to open the works contained in them. From the standpoint of famine relief we consider it essential that the exact local situation of all works on the programme should be defined and be easily recognizable; that all necessary measurements should have been made; and that the estimates of probable cost and of the number of labourers, which each work is able to employ, should be ready. To secure the constant revision of the programmes of public works, we suggest that current projects of the Public Works Department should be embodied in the famine programmes. The same procedure should apply in regard to works the cost of which is debitable to local funds. We also consider it essential that full and detailed programmes of village works, whether they are to be conducted by the revenue authorities or by private persons, should be prepared by the former with professional assistance, and that every year enquiry should be made and information recorded as to the private persons able and willing to undertake the construction of such works.

28. *Reserves of establishment.*—The great difficulty in every famine is to get together suitable establishments. In this perhaps more than in any other matter is it necessary to be prepared. It would be easy to multiply instances in which the policy of the Local Government was hampered, or the administration was diverted from its proper course, by the insufficiency of establishments. To take only a few—the rush on the works in the Buldana district of Berar and in the Chhattisgarh Division of the Central Provinces, and the complete disorganization of those works; the failure to open works at an early period of the distress in the Central Provinces; in Bombay the unreadiness of the Public Works Department in nearly all districts, the system of weekly instead of daily payments, the prolongation of the test works stage, the demoralization caused by the minimum wage, with its sequel, the penal wage: all these were due, in the main, to want of establishment. We recognize the difficulties that the Local Governments had to contend with, and the self-sacrificing zeal of their officers in their efforts to remove those difficulties, though we do not think that their efforts tapped all sources of supply. But the disasters which were caused by the dearth of establishments accentuate the importance for the future of maintaining in every district, or in every division, lists of all persons suitable for employment, particularly of persons likely to make civil officers, charge officers, work agents, and circle officers, whether they are already

in Government employment, or are unsuccessful but approved candidates for it. There is a natural prejudice amongst professional men against the employment of those who have not received a professional training; but in times of famine the net must be cast wide and experience has shown what valuable material lies unnoticed in unexpected quarters. The Educational Department, in particular, has been able on emergency to supply very trustworthy and efficient famine officers. In Gujarat schoolmasters were successfully enlisted as cashiers, and, although they had not the facility of trained accountants, they are said to have been preferred by the people. In Gujarat, again, as in Bengal and the North-Western Provinces in 1897, educated young men, who had not adopted any career in life, were found to make efficient charge and circle officers. Experience in this and the last famine shows how quickly educated men learn what they have to do, and how soon they acquire the necessary faculty of control.

29. *Reserves of tools and plant.*—The want of tools was felt at the outset not less than the want of establishment. This has been the experience in most famines, with the result that the people sit down, often for many days, and abandon themselves to idleness. The market at the time cannot supply the Government and its officers with tools and plants sufficient to meet at once the demands arising simultaneously from extensive areas of distress; and we therefore advise that a large reserve of tools should be maintained by the Public Works Department in every province. The initial cost of such a reserve is small, and the deterioration of stock is trifling. Such a reserve, sufficient to supply the numbers on works in the month of January of the worst famine year on record, would give the Public Works Department breathing time, and go far to prevent those demoralizing rushes on the works to which we have alluded.

SECTION II.—*Lessons of experience.*

There are certain generalizations from experience which we place in the front of our recommendations.

30. *Put heart into the people.*—We desire to place special emphasis on the immense importance of “moral strategy.” There is no greater evil than the depression of the people. It is a matter of universal experience that moral depression leads down a sharp incline to physical deterioration. A main trait in Oriental character is proneness to succumb to difficulties and to accept them as inevitable. But, if given heart at an early stage, the Oriental will fight upon the side of the Government, which is his own; for his belief in the power of Government is of a kind which to Western ideas is almost profane. The fullest advantage should be taken of this belief at all stages, but especially at the outset, for the moral impetus given then should last through the first period of the famine. It is scarcely possible to overstate the tonic effect upon the people of early preparations, of an early enlistment of non-official agency, of liberal advances in the earliest stages, and of early action in regard to suspensions of revenue.

31. *Proceed from the beginning on a comprehensive plan and publish it.*—Amidst the manifold details of a Code there lies a danger that the broad principles of famine relief may escape the notice of those who have to administer it. It is only on a knowledge of principles that the various incidents of famine administration settle into their proper places, and it is obviously of importance that all controlling officers should understand the principles and bearings of what they have to do. It may be hoped that in the revision of the various Provincial Famine Codes, which will doubtless be now undertaken, the principles of famine relief will, so far as possible, be laid down as well as the practice; but we think it highly desirable that on the threshold of great relief operations the Local Government should call the attention of its officers to the main objects to be borne in mind, and the main lines of action to be followed. In illustration of what we advise we may point to the series of circulars issued in August 1899 by the Administration of the Central Provinces. These circulars, though on some points open to objection, had, on the whole, an excellent effect; for in no province was there less misunderstanding of the intentions of the Government than in the Central Provinces. In Bombay, on the other hand, the apparent absence of a clear appreciation on the part of its officers as to what the general administrative policy of the Bombay Government was, led to hesitation and misunderstandings, which would, we think, have been avoided had a clear plan been laid down and published in advance. And in other provinces also such action on the part of the Government would have prevented inconvenience.

32. *Make liberal preparations in advance of pressure.*—In this matter it is necessary to take financial risk. The money spent in preparation may, indeed, be wasted; but the loss is trifling in comparison with the expenditure which want of preparation entails. It is of the first importance that the machinery should be ready, and that no greater pressure should be put upon it than it can respond to. If the standing preparations that we advocate are efficiently maintained, it will only be necessary to expand them on occasion.

33. *Once the preparations have been made, wait on events.*—We do not overlook the fact that slowness to recognize the presence or realize the intensity of famine has been one of the chief causes of failure in the treatment of it; but none the less are we impressed with the danger of despondent views. Again, there is a natural tendency, when large preparations have been made, to be quick in acting upon them. There is also the danger of false alarms—a point to which we shall refer again in discussing the advantages of test works. It is enough to say here that it is never safe to act on *a priori* assumptions of distress. The decision in the Central Provinces to act in advance of disclosed pressure led, we consider, to unnecessary relief at the outset, and to untoward events subsequently. Action in advance of disclosed pressure involves great risk of extravagance and demoralization.

34. *Bring from the outset influential non-official interests into touch with, and support of, the official organization.*—We advocate, at all stages, the greater use of non-official agency. In those provinces in which there are influential landowners it is most important to associate them from the outset with the Administration, as well in forecasting the pro-

bable degree of pressure as in making preparations to meet it and in carrying relief measures into effect. We shall hereafter strongly recommend the policy of administering relief as far as possible through private agency. For such a policy to be successful, it is essential to have a detailed plan of private relief works made out from the beginning and to have secured, in advance, the consent of landowners and men of local influence to take upon themselves the responsibility for controlling and executing these works. It is especially important to associate the landowners with the Government in financial responsibility for works calculated to be locally reproductive; and with this object a scheme should be prepared beforehand, specifying the extent to which the landowners will voluntarily undertake the construction of these works, either at their own expense, or aided by advances, partly or wholly recoverable, made by the State. Such advances may be made to landowners on their own security or, in the case of village communities, on the joint security of their principal members. Indeed, it may be possible for officers of tact and personal influence to induce the landowners or village communities to undertake, on receipt of reasonable contributions from the State, the entire administration of famine relief on their estates, or in their villages. We were struck by the little use made of non-official agency in every province in the recent famine and this is the impression, we gather, that was left upon the public mind.

35. *Appoint a Famine Commissioner where the head of the Local Administration cannot be his own Famine Commissioner.*—This recommendation was made by the Famine Commission of 1880. The chief advantages of such an appointment are uniformity of procedure, promptitude in action, the reduction of correspondence by frequent personal conferences, and the speedy removal of any misunderstanding of orders. To secure these advantages, it is necessary that the Famine Commissioner should be constantly moving about, supervising operations and giving advice and instructions on the spot, with the authority of the Local Government. No Provincial Government appointed a Famine Commissioner in 1900, but in Bombay the Chief Secretary to Government made inspection tours, during which he exercised to some extent the functions of a Famine Commissioner. Mr. Monteath's tours were most useful; he detected many abuses and defects of administration, and we should be prepared to cite the generally beneficial results of his inspections as supporting our recommendation for the appointment of a Famine Commissioner, especially in a province administered by a Governor in Council. But in Gujarat the Chief Secretary's ill-defined position led to misunderstanding and failure in action, which would have been avoided had the Bombay Government appointed him to be a Famine Commissioner in precise and definite terms. It is absolutely essential to keep distinct the functions of a Famine Commissioner, who is a high executive officer, exercising *ad hoc* the powers of the Local Government, and the functions of a Famine Secretary, which are in no way executive.

36. *Create from the outset a thoroughly efficient accounts and audit establishment.*—Only those who have had practical experience can realize what an assistance an efficient accounts establishment is during the progress of a famine, and what an immense amount of subsequent

labour is caused by an inefficient establishment or an incomplete accounts system. We cannot insist too strongly on the necessity for a uniform and simple system of accounts throughout a famine. There is no greater hindrance to executive officers engaged in famine relief than the harassing demands upon their time of an elaborate accounts system. The accounts should from the outset be controlled and worked by a special staff organized by the Examiner of Public Works Accounts and the Accountant-General; and travelling auditors should be employed to visit famine works periodically, in order that the accounts may be kept up to date and be finally closed when the relief operations have ended.

SECTION III.—*Danger Signals.*

37. The risks attaching to the policy which we advocate, of waiting on events are reduced to a minimum by a careful look-out for the regular premonitory symptoms of distress. Apart from the failure in the rainfall, and the movements of prices, the following warnings are nearly always given and in something like this order :—

- (1) the contraction of private charity, indicated by the wandering of paupers;
- (2) the contraction of credit;
- (3) feverish activity in the grain trade;
- (4) restlessness shown in an increase of crime;
- (5) unusual movements of flocks and herds in search of pasturage;
- (6) unusual wandering of people.

To some extent these warnings may be deceptive. The first three may be only temporary in character, as was the case in the North-Western Provinces in 1899; the full effect of their meaning is not known until test works have been opened. The fourth is often found to disappear directly the first panic of rising prices has passed.

38. Wandering is usually regarded as a certain sign that famine has begun; but it is necessary to discriminate between the two kinds of wandering. In hard times not amounting to famine the contraction of village charity sends adrift the regular paupers: such wandering, in our opinion, is properly, and may be completely, provided for by the establishment of poor-houses at central places, if, indeed, private charity, organized or independent, does not afford sufficient relief. Again, in parts of India migration of men and herds takes place in ordinary seasons, and, so long as it remains within the usual limits, this does not call for action. But it may be laid down as a general rule that any unusual or aimless wandering of men or herds in search of food or water is a sure sign that famine has already begun, and that relief is urgently required. To anticipate and prevent the wandering of paupers and individual labourers is impossible without assuming the existence of famine before it has been proved; but the greatest vigilance is necessary to stop even wandering of this kind before it goes too far; while the wandering, in masses or groups, of people who are not in the habit of migrating, is a certain sign that relief has been too long delayed in the places from which they come.

39. On the first signals of distress the activity and vigilance of the Intelligence Department should be redoubled, and it is particularly

desirable to obtain early and correct estimates of crop failure. In Madras, we are informed, there is a system in ordinary years of monthly forecasts, as well as statements of the outturn of the harvest; and there are obvious advantages in such a system for *ryotwári* tracts. For *zamindari* tracts in ordinary years we consider that the present system of seasonal or crop forecasts is sufficient; but a special forecast should be made when famine threatens, and this should be corrected and completed by a very early date—in Upper India not later than the end of October, and, generally, before the necessity for extensive relief measures may be expected. Rough forecasts should, of course, be made at a much earlier stage, and Sub-divisional Officers should, as far as possible, test and check them on the spot.

SECTION IV.—*The order of relief measures.*

40. We have dwelt upon the danger signals, not because in the recent famine they were overlooked—for by the middle of August the warnings had been signalled all along the line—but because in process of time these things are apt to be forgotten. It rests, of course, with the Local Governments to read the signals, and to decide the moment for translating preparation into action. When the Local Government has satisfied itself that action will be necessary, a very practical question at once arises as to the order in which the relief measures should be undertaken. This difficulty was experienced in a greater or less degree in every province that we visited, particularly in regard to the period at which the distribution of gratuitous relief should begin. The question was touched, but only lightly, by the Commission of 1898;* it was scarcely even considered by the previous Commission. As stated above, we consider it essential that a complete and authoritative plan of relief should be laid out from the beginning and explained in a series of circulars to the officers who have to work it. Such a plan would naturally be resolved into two sections, corresponding with the well marked preliminary stages of a famine. It will, we think, give clearness to our recommendations if we throw them into the form of a standard plan illustrating it by examples from recent experience.

FIRST STAGE.

41. I.—The first act of the Local Government should be to review the financial position and appropriate the necessary funds.

II.—Arrangements should then be made for the collection of establishment—administrative, executive, and sanitary—and for the distribution of tools and plant. We have already dealt with this to some extent and if our recommendations as to lists of establishment and reserves of tools and plant are adopted, there should be no difficulty in meeting immediate requirements. But it will still be necessary to make active preparations for the future.

III.—Liberal advances should be given at this stage for the construction of temporary, and the repair of permanent, wells and for other village improvements—

(i) as a means of employing labour;

* Paragraph 529 of report.

- (ii) as a means of securing the *kharif* and *rabi* crops;
- (iii) as an act of moral strategy, to give confidence to the people, and to stimulate local credit.

This was recommended by the Commission of 1898, but little action was taken in any province. It is only necessary here to say that we attach special importance to advances at this early stage.

IV.—The recruiting of non-official agency and the organization of private charity should be vigorously taken in hand.

V.—Liberal advances should also be given for the purchase of seed for the ensuing crop. The advances under Act XII of 1884 in the months of September and October 1899 were small.

VI.—The police should be supplied with funds to relieve wanderers in distress.

VII.—Test works should be started, and poor-houses should be opened at the chief centres of population.

VIII.—Enquiries as to suspension of revenue should be begun.

IX.—Relief circles should be organized, and the necessary inspections should be made. In those provinces which possess a well organized Land Records system the bases of these relief circles will naturally be the *kánúngo's* or superintendent's circles. But in provinces which do not possess this organization it is desirable that in ordinary years relief circles should be marked out in anticipation of the need.

X.—Preliminary lists should be drawn up of persons eligible for gratuitous relief.

XI.—If there are threatenings of a scarcity of fodder or drinking water, steps should be taken to meet it, and to encourage private enterprise to import fodder and to develop the water-supply.

42. *Organization of private charity.*—This is one of the most difficult problems of relief and one of the most important. It is hard to induce the public to submit its charity to the regular and impersonal methods which alone can be successful in the long run. The only chance of success is for the District Officer to take the lead at the earliest stage. Much was done in Surat and other individual districts, but, generally speaking, the importance of this subject was, we think, hardly appreciated at its full value. A very remarkable degree of success was, however, attained in Berar. In the three richer districts of Akola, Amraoti, and Ellichpur subscriptions were collected in cash or grain, and non-official committees were appointed in all the villages to distribute doles and clothing to the poor. So efficient were the arrangements that this private charity had the effect of postponing, we were informed, the necessity for any large expansion of Government village relief, until the hot weather had well advanced. This success is all the more noteworthy for having been achieved in a *ryotwari* country.

43. *Test works*—We agree generally with the conclusions* of the Famine Commission of 1898 as to the conditions on which test works should be conducted, but we are of opinion that a greater prominence should be given to them. We believe that the right development of the relief system hinges very greatly on the proper use of test works.

* Paragraphs 414, 415.

They were generally utilized in all provinces except the Central Provinces, where they were only attempted in three districts. The defective management of test works in the Central Provinces during the famine of 1897 had apparently created a prejudice against the very notion of a test—a striking instance of the confusion of thought, which makes defective administration the standard and measure of principles. The objection to test works rests also, it would seem, upon a misconception of their object, which is, “not to relieve famine, but to test the presence of it; not to appease hunger, but to find out whether people are hungry.” Without test works it is not possible to gauge the existence or the pressure of distress, or again, to discover the time for entering upon substantial measures of relief. In illustration of the value of test works we would cite the case of the Agra Division and the affected districts in Madras in 1899, where many indications of famine were present, and the local officers considered it at hand, but where test works showed that general measures of State relief were not required. We have no hesitation in recommending that the omission to open test works should not be repeated in any future famine.

44. In regard to their management, we make the following recommendations :—

- (a) The power to open them should rest with the Collector.
- (b) Where possible, they should be managed by an officer of the Public Works Department. The advantages of having professional control at the test stage were recognized by the Commission of 1898; but they do not seem to have been always secured during the recent famine. But this professional control should not relieve the Collector and his subordinates of complete responsibility for the efficiency of the test works. At no stage of relief is the vigilance of the revenue authorities more incessantly required, as experience in the Bombay Deccan shows.
- (c) The test should be stringent, though not repellent. We agree with the Commission of 1898 that payment should be strictly by results, with a maximum equal to the normal Code wage; that there should be no minimum, no restday wage, and no allowance to dependants. Differing from the Commission of 1898, we think that in no case should power be given to earn beyond the normal Code wage. When it is desirable to permit additional earnings, the time has come for conversion into regular relief works. The conditions which we lay down are hard, and they will not be long endured by the people; but it is of the essence of test works that the lesson which they are intended to teach should be quickly learned and unhesitatingly applied. In Ajmer the tests were admittedly too lenient; in Bombay they were unduly prolonged. The result in the former case was extravagance; in the latter, inadequate relief.
- (d) The Commission of 1898 advised that the tasks should be “not less than by the Code scale.” The Code tasks are only 75 per cent. of the task commonly performed by labourers in ordinary times. The reasons given for the reduction of 25

per cent. were "the fact that a large proportion of the labourers are doing unaccustomed work; that many may be physically and morally depressed; and that the disruption of their ordinary life and the novelty of their position on relief works probably act injuriously on their bodily powers."* We are of opinion that these conditions do not fully apply to test works, because these works ought to be opened at a very early date, before such depression has appeared, and also because the first to come on relief are the labouring classes. We recommended that in the case of earthwork a task somewhat above the Code task should be imposed, and, if the test work be a village work, the full ordinary task. In the case of metal breaking, for which special practice is required, we think that the Code task will ordinarily be sufficient.

- (e) Labour should be the only test; neither a distance test nor compulsory residence should be imposed.
- (f) Complete muster rolls should be maintained on test works in order to record the proportion of sexes and classes coming to them. Experience, especially in the Deccan, shows that women and children not in need of relief are apt to flock in numbers to test works from the neighbouring villages. If their numbers are excessive, it may be desirable, as a temporary measure, to give the women and children cooked food as a wage, with a view to ascertaining the reality and extent of the pressure.

45. *Poorhouses*.—The object of poorhouses is to collect and relieve paupers sent adrift by the contraction of private charity. These unfortunate people gravitate at an early stage towards the towns, and poorhouses should therefore be opened in towns to receive them. Poorhouses should not be employed, as suggested by the Commission of 1880, to test the need of any person to receive relief; but at a later stage they may appropriately be used for contumacious idlers.

46. The opinion is held in some quarters that by an early distribution of gratuitous relief in the villages wandering can be prevented, and that thereby the need for poorhouses can be removed. In the Central Provinces this view is popular on account of the failure of poorhouses in those provinces, due to mismanagement, in 1897. Here, again, there is confusion of a matter of principle with a matter of administration. We strongly dissent from the view which dispenses with poorhouses. We consider that the wandering of paupers at the outset is a signal for which the Administration ought to wait. We have, in the case of the Agra Division, to which we referred above, an illustration of the usefulness of poorhouses; they afforded ample relief and obviated the necessity for village doles to which many signs pointed.

47. The Commission of 1898 regarded the question as one for local discretion, but seems to have thought that the opening of poorhouses should be deferred until relief works and gratuitous relief had been commenced. We have already given reasons for thinking otherwise. Had they been opened in the Khandesh district in the early days of the

* Paragraph 131 of the Report of the Famine Commission of 1880.

famine, they would probably have saved much suffering. In short, poor-houses cost little; they can do no harm, and they may postpone for the time or altogether the necessity for more extensive and costly measures of relief.

SECOND STAGE.

48. Directly the numbers attending test works indicate that further relief measures are necessary a new stage begins, and the full machinery of relief should be brought into play. We have considered whether at this or any other stage it is possible to distinguish, in the matter of relief, between the conditions of scarcity and of famine. We are unable to arrive at any satisfactory results. It is impossible to fix in formal language exactly the point where conditions of scarcity cease, and where conditions of famine begin. It is a question of degree, into the proper appreciation of which many considerations must enter, and which Local Governments alone are competent to decide.

49. In any case there should be no delay whatever in converting test works into relief works directly they have served their purpose as tests. Conversion should take the form of the addition of relief to dependants, either by cooked food or by cash doles. The unfortunate delay in conversion in the Bombay Deccan, where in some cases the test works were maintained for three or four months, and were only then converted when the Chief Secretary came round on tour, leads us to think that a greater responsibility in this matter should be thrown on the Collector, and that he should be given power to order conversion, reporting his action at once to the Commissioner.

50. Simultaneously village inspection must be fully developed; the staff should be increased, and the circles mentioned in paragraph 41 (IX) above should be sub-divided if sub-division be required. Where necessary, the village accountant should be given an assistant to carry on his ordinary duties: and the circles should be so arranged that every village may be carefully examined once a week by the circle officer, who should not be below the rank of a *náib* tahsildár (head *kárkun*) or *kánúnga* (circle inspector). No effort should be spared to get responsible men for the post of circle inspectors. Men in permanent employ in other departments should be freely used, but ministerial officers accustomed to sedentary work do not often make good circle officers.

51. The *distribution* of gratuitous relief should also begin when test works are converted to relief works: and care should be taken to see that all those entitled by the Code to receive it are brought upon the list. We were struck by the failure of the local officers in Bombay to take the action in this respect which the Code and the orders of the Government required; a failure, which was one cause of the great mortality in Gujarat. On the other hand, the orders of the Chief Commissioner of the Central Provinces to give gratuitous relief, even to able-bodied labourers, between August and October 1899, cannot be approved.

52. It is necessary at the outset to be strict in the administration of gratuitous relief, but the existing categories of persons entitled to such relief are sufficiently strict. And, while we should strongly condemn, as demoralizing any profusion in this matter, we attach great importance to bringing on gratuitous relief at an early stage all those who on a fair interpretation of the rules are entitled to it.

SECTION V.—*Class of works.*

53. While test works will ordinarily be chosen from the current programmes, the section of regular relief works involves large issues of policy. The decision will have been made before the famine begins, but a statement of the relative merits of large central and small local works will come conveniently here. Before, however, we proceed to it, the question of nomenclature must be settled. Until 1898 works were classified as *large* or *small*. With a view, amongst other things, to simplify the preparation of programmes, the Commission of that year suggested a revised classification of *public* or *village* works. Under the term public works they included "all works the cost of which is properly chargeable to public funds"; and under the term village works they put "all works, whether large or small, that would in ordinary times be executed at the cost of private individuals or communities." In Bombay the old classification is, however, still preferred. It is possible, we think, to combine the advantages of both classifications; but both are incomplete in so far as they do not have a separate term for those small works which in times of famine *are* constructed at the expense of private individuals.

54. The following classification will, we believe, meet all practical requirements :—

Public works.—(a) Large departmental... These will be works under the control of the Public Works Department, containing one or more charges of 5,000 people each.

Public works.—(b) Small departmental... These will be works under the control of the Public Works Department, containing less than 5,000 people each.

Village works.—(c) Non-departmental... These will be works under the revenue authorities; such as tanks, embankments, reservoirs, village roads, drainage cuts, other sanitary improvements, and generally local works of use to a particular village or group of villages, in the construction of which local and gratuitous unofficial agency will be, as far as possible, enlisted, but the whole cost of which will be debited to the State.

(d) Private— (i) aided (ii) unaided	}	...These will also be village works, but constructed entirely by private individuals or communities. Where part of the cost is borne by the State, the works may be called, <i>aided</i> , and where the whole cost is borne by the private individuals or communities the works may be called <i>unaided private works</i> . In the case of <i>aided private works</i> the revenue authorities may exercise a general supervision; in the case of <i>unaided private works</i> there will be no official interference of any kind.
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55. The recommendation of the Commission of 1898 on the general policy is contained in the following passage :—

As a general rule, * * * public works * * * should be first opened as relief works and should form the commencement from the backbone of the relief

operations. But in cases in which no such works have been entered in the programmes, or can be carried out only at an excessive distance, say more than 15 miles from the villages requiring relief, or in which it has been decided that small village works will be more generally advantageous to the people at large and the more effective or economical form of relief, arrangements should be made for opening such works. Ordinarily, however, village works should be reserved until the advent of the hot weather or as a reserve in case of epidemic disease. Village works may, however, with great advantage be undertaken even in the earlier stages of distress, by landowners with the object of keeping their tenants or labourers together, and the landowners should be encouraged by loans, wholly or partly recoverable, to undertake them at this stage.

And the Commission went on to enumerate the advantages of public works.

56. There is no more important question than this in the scheme of famine relief, but we are not required by our instructions to consider it in all its aspects, in as much as the utility of the works constructed during the recent famine has been reserved for separate enquiry. The final decision will largely depend on the utility or otherwise of the public works and the sufficiency or otherwise of programmes for village works in particular districts. We can, therefore, only offer a tentative opinion. We agree generally with the statement of the Commission of 1898 which we have quoted, and which seems to give Local Governments ample discretion to adapt the programmes to local needs and opportunities. We would, however, lay great stress on the fact that there is a large and influential body of opinion in favour of village works as being—

- (a) more economical;
- (b) more useful;
- (c) less exposed to outbreaks of cholera and epidemic disease;
- (d) more easy to control;
- (e) less open to the objections of—
 - (i) interference with the labour market,
 - (ii) neglect of agricultural dwellings and stock,
 - (iii) hindrance to the early resumption of agricultural activity;
- (f) less likely to loosen moral and domestic ties.

57. We invite special attention to the last two considerations, which have not, we think, been sufficiently appreciated hitherto. We attach much weight to the fact that non-official opinion is almost unanimous in favour of village works. It is a weighty argument in favour of village works that they avoid the corruption of the subordinate staff on public works—one of the greatest scandals of famine administration; that they save expenditure on hutting, hospital, and other incidental charges, which are very heavy; and that they escape the difficulties and delays occasioned by want of establishment and tools and plant. The dangers of village works are their attractiveness, and the demoralizing tendencies that follow an undue popularity; to meet these we propose elsewhere a lower wage, a higher task, no relief to dependants, and, if necessary, some system of individual selection. But, while in favour of village works as the backbone of the relief system in a district where a sufficient

number of them can be found, we are not sure that there are many such districts; and we consider that, even in such districts, it will always be necessary to have some suitable large public works in addition, not only as an alternative, but also as a safeguard.

58. But, whatever place be taken by village works, it is essential that they should be mapped out in advance. We find that this had not been done in any province before the famine. A programme of works which can be utilized at a moment's notice is absolutely indispensable. It is only by such readiness that panic can be overcome; and a cholera panic accounts perhaps for more mortality than any other incident in a famine. We believe that, had such a scheme been in reserve in Gujarat, for instance, much of the panic, and some of the mortality, would have been avoided. Villages may with advantage be grouped together, a certain number of works being laid out for the group. When cholera breaks out on a public work, it will then be possible to disband the workers, giving them a few days' pay in advance and directing them to appear by gangs at a stated place on a fixed date. The same procedure can conveniently be adopted, as the hot weather advances, with a view to getting the people near their homes before the break of the rains, and, with a view to the timely distribution of advances.

59. Our enquiries indicate that village works might profitably have been opened in far greater numbers during the recent famine. In the Central Provinces, indeed, from December 1899 onwards a considerable use was made of such works; in the rice tracts generally the officers are strongly in favour of them, particularly in the Chhattisgarh Division. But no scheme was laid down in advance, and at the time when the need for them was greatest, from the end, that is, of May 1900, when large public works were practically closed, it did not enter into the plan of relief to extend them freely. In Berar they were adopted only during the rains, and even with extremely low wages they were found to divert labour from the fields. No attempt was made to start them in the Punjab or in Ajmer. We have recorded much evidence in Bombay in favour of village works, but they were only opened after the cholera panic had begun, and then for the most part in Gujarat. We think that the good results of village works were heavily discounted in the recent famine by the universal absence of a programme, and that in consequence the system has not yet been given a proper trial.

60. Finally, we would again emphasize the advantages of private works, both aided and unaided, at all stages and especially at the commencement of distress, and the need for their encouragement by periodical enquiry in ordinary times, and by advances and by personal influence in times of famine.

SECTION VI.—*The number of works and special tests*

61. But the question of works does not end here. Even if public works are the backbone of the relief system, a doubt will remain—it was greatly felt in Gujarat—as to the number of those works required in any given area and their conditions. The Commission of 1880 laid down that one large work should, if possible, be opened in each sub-division of a district, in which severe distress prevailed. "It is not necessary," they

added, "and may often be undesirable, to offer to every one work close to his door, but on the other hand it is unreasonable to expect people to travel great distances in order to obtain relief, or to make such a journey a condition precedent of their being received on relief works, and we think that such a test should not be applied" (paragraph 128). But they appear to have contemplated that residence on the works should be the rule; for later on they wrote that "the able-bodied of the labouring class with their families, so far as they are healthy and capable, should be settled on works at a moderate distance from their villages" (paragraph 146.) The Commission of 1898 considered "that the long distance test * * * * is unnecessary as a test of distress, and may seriously affect the efficiency of relief operations when distress is at all severe"; and that "the * * plan of making residence in a camp compulsory, however near the village, is one which * * it is difficult to justify as either necessary or desirable" (paragraph 177); and, in other passage, they indicated fifteen miles as the extreme distance, which people should be forced to go.

62. These questions do not arise where establishments are strong enough to enforce the performance of a sufficient task; they are apt to become prominent when imperfect organization on the works attracts to relief people who are not in need of it. We are not prepared to fix precisely the area which a work may be expected to serve. Much depends on the density of the population; but the question really hinges on the character of the people and the previous history of the tract. If the people are habituated to famine or prompt to take relief, the number of works may be comparatively few; but, if on the other hand, the people are strangers to famine, or shy or reluctant to come on works, as was especially the case in the Panch Mahals and Kaira districts of Gujarat, the number of works should be multiplied, at any rate in the early stages of the famine, or until the hesitancy has been overcome. As to a distance test, in a modified form and in a combination with a system of selection, such as we are about to describe, it may legitimately be employed; but generally it is easily evaded and is proved to be open to abuses of favouritism and corruption where distress is light; it is altogether unsafe, if, indeed, it be practicable, under conditions of actual famine. Our enquiries have also led us to the conclusion that compulsory residence on the works is equally to be condemned; it requires a large staff to enforce it, and, if there is a large staff, this test should not be necessary. There is evidence that people, particularly of the more respectable classes, are deterred by the rule of compulsory residence from seeking the relief, which they need; and that such residence is the cause, as it provides the opportunity, for immorality. Moreover, it involves a large expenditure; indeed, the cost of proper hutting has been found to be prohibitive. We agree with the Commission of 1898 that in ordinary circumstances the only test required in connection with relief works is the labour test; and we think that a distance test and compulsory residence should not, for the future, enter into the ordinary scheme of relief.

63. Extreme cases no doubt occur, which seem to shake any rule. In the Broach district of Gujarat, for instance, the Chief Secretary to

Government found the works both numerous and unduly attractive; and, with the object of driving off them people who were not in need of relief, he ordered the wages to be reduced. He fully recognized the risk attaching to this action, and as safeguards he ordered the opening of a large work on the full Code wage a few miles off, on the other side of the Nurbadda, increased activity in village inspection, with a view to the detection of any deterioration in the condition of the people, and it is presumed, the extension of gratuitous relief. There was delay in opening the large work, and there does not appear to have been any increased activity in village inspection. Large numbers left the works, and, although no mortality can from the death-rate statistics be traced to the experiment, still there was physical deterioration and the old wage had soon to be restored.

64. We have no doubt that many people, who are not in need of relief, had been attracted to the Broach works by the lax discipline in force there, and that some special test was called for to exclude such persons; but the results exemplify two dangers attaching to the action taken: first, the danger of relying on safeguards, when the subordinates are not efficient, and the weakly gangs have not been separated; and, secondly, the danger attaching to a general reduction of wages. A general reduction of wages and a general raising of the task are alike open to the strong objection that they affect the weak and the needy far more than those who do not require relief. The proper course, we think, in such cases, is first to separate the weakly gangs, and then to raise the task for the able-bodied, or, in extreme cases, to draft the able-bodied to works at some distance from their homes. Such drafting is, however, a last resort, and should only be undertaken when everything else has failed.

65. In this matter everything depends upon the establishments; but, generally speaking, drafting to distant works is open to the same objections as the distance test. It is difficult to carry out; and, if successful as a test, it is apt to be dangerous from the point of view of relief. We consider that, in ordinary circumstances, drafting is legitimate only when it is designed to take the workers to more useful or fresh employment, or to avoid infection. An illustration of the dangers, to which even legitimate drafting is exposed, is afforded by an interesting experiment in Hissar. The local programmes of work being thought inadequate, and labour being in demand upon the Jhelum Canal, it was proposed to transport to the canal some 80,000 volunteers from the Hissar district. The usual absurd rumours were promptly circulated, and eventually some 11,000 persons only were willing to go. On arrival at their destination cholera broke out among them and carried off—upon a careful estimate—about 1,000 of their number. In addition, it is estimated that some 1,260 persons deserted in the cholera panic. On the approach of the monsoon less than 6,000 of those who had been deported were railed back to Hissar. Some 500 stayed on the canals, and the balance of more than 2,000 cannot be accounted for. We consider that, in ordinary circumstances, the risks involved in moving large bodies of men great distances away from their homes do not justify the attempt to draft them.

66. The opinion is held in many quarters that to meet special emergencies the principle of personal selection may safely be resorted to; and experiments in this direction have been made in more than one province. In the Jubbulpore Division of the Central Provinces, where famine was not acute, Mr. Fuller, the Commissioner, instituted a combined system of selection and distance test by refusing admission to a work without ticket to any one living within four miles of it. This system was safeguarded by the provision that if the rejected applicant went on to the next work he was at once admitted; and it resulted in a reduction of the numbers on the works, without any bad effect. A similar system was successfully worked in the Rohtak district of the Delhi Division; but it was not attempted elsewhere in the Punjab, the Local Government thinking that "selection can only be resorted to when it is certain that distress is not really severe." We consider that, with existing establishments, it is not safe to depart from the principle laid down by the Famine Commission of 1880, that in the case of labour self-acting tests alone are possible on public works; but at the same time we consider that experience has shown that a system of individual selection, combined with a distance test, if carefully worked, is suitable for districts in which distress is not acute. We are also of opinion that it may safely be tried in the case of village works.

SECTION VII.—*Control of Works.*

67. The moral to which experience in the matter points is to have strong establishments, and to have them well under control; and this raises the question of the relations of the Public Works Department to the revenue authorities—a question which has been settled, but is always rising up again. The following were the recommendations of the Commission of 1898 :—

The Superintending Engineer in his circle and the Divisional Engineer in his division should be responsible for the proper conduct of all departmental relief operations by their respective subordinates in accordance with the rules of the famine and Public Works Department Codes and such supplementary orders as may be issued from time to time by the Local Government. They should by personal communication and otherwise keep themselves in constant touch with the Commissioner and Collector on all matters not of a strictly professional nature, such as the opening, extension, transfer or cessation of departmental relief works. Tasks and wages, though on ordinary works matters of a professional nature, should not on relief works be fixed or altered by the Superintending or Divisional Engineer without a reference to, and the concurrence of, the Commissioner or Collector. * * In any case in which the civil staff and Public Works departmental agencies appear to overlap and difficulties are thereby produced, the Collector should apply a remedy. Should his orders be questioned as contravening departmental orders, a reference may be made to the Divisional or Famine Commissioner, as the case may be, whose orders should be carried out at once, and should be final, subject to a reference to Government. The Commissioner within his division, and the Collector within his district, will exercise general control over all relief operations in times of scarcity or famine. Within a district the Collector will be the agent of Government for carrying out the measures of relief which may be introduced. He will exercise general supervision over all works and arrangements for giving relief within his district, and will be responsible to Government for their efficiency. His decision should be accepted pending reference to superior authority in all matters relating to the employment and wages of the labourers, the opening or closing of works, the arrangements for, and actual distribution of, gratuitous relief, and generally in all other matters which are not of a professional nature. Officers of all departments employed on famine duty within the limits of his district should obey his orders.

68. We have nothing to add to this expression of opinion except, it may be, to make more clear the supremacy, in his district, of the Collector. We have found that in practice officers of the Public Works Department, in the exercise of a zeal otherwise praiseworthy, have encroached upon the functions of the Collector. With regard to the fixation and variation of tasks, for instance, which both Commissions have explicitly declared* to be not a professional matter, we find that, in fact, the Public Works Department has assumed an independent position, particularly in the Central Provinces and Bombay. Again, we find that in Bombay there was in many districts a feeling, for which, indeed, there was no justification in the orders of the Local Government, that the district authorities were more or less divorced from the immediate supervision of, and responsibility for, public works, or at least in a state of separation from them. We are anxious to recognize the devotion to duty of the superior officers of the Public Works Department; but we desire to insist, beyond the possibility of misconception, on the absolute authority and the complete responsibility, of the Collector in all matters affecting *relief* or the advantageous and economical expenditure of public funds.

69. Again, in all matters connected with *discipline* the local representative in the district of the Public Works Department, be he an Executive or a District Engineer or a Supervisor, should be the assistant of the Collector and responsible to him. And in order to carry on the chain of responsibility and enforce such discipline, the officer in charge of any work should control all subordinates on the work or attached to it, including the medical subordinates.

70. The position of Assistant and Deputy Collectors and officers of that class in regard to public works should also be defined, for in many cases they appear to be themselves in doubt about it. We recommend that such officers should regularly inspect public works in all their branches, forwarding their reports to the District Engineer (*i.e.*, the local representative for the district of the Public Works Department) for transmission to the Collector. But such officers should also be held responsible for correcting at once any abuse of an urgent and serious character, reporting their action through the District Engineer without delay. The case of the inspecting officers, such as Famine Superintendents, who are often officers of the Staff Corps lent by the Military authorities, is, in the main, similar to that of the Assistant Collectors. Their duty is to supervise all forms of relief, but, in so far as public works are concerned, they should note for the information and guidance of the responsible officer on the spot their recommendations and observations; and they should exercise the same powers of immediate interference in urgent cases as the Assistant and Deputy Collectors. If Famine Superintendents consider their inspection notes of sufficient importance to be brought to the Collector's attention, they should note the fact, and it will be the duty of the Officer in Charge to forward them through his superior officer.

71. In the section next following we recommend the appointment for each charge of a special civil officer; his position and functions may, however, be appropriately considered here. He should be a person of good social position and of the necessary education. His pay should be such as to attract persons of the right stamp, and should in no case be

* Paragraphs 129 and 130 of the Report of the Famine Commission of 1880, and paragraph 423 of the Report of the Famine Commission of 1893.

less than Rs. 50 per month, with a horse allowance of Rs. 10 to Rs. 15; on specially important works a superior class of man, with a higher salary, may with advantage be employed. Such men were found in the Central Provinces, Ajmer and the Punjab, and appear to have done excellent work. A lower class of man upon a smaller salary—*karkun* or clerk, or even a village accountant in certain cases—was appointed special civil officer in Bombay, and often proved unfit even for his restricted position there. As a rule, ministerial officers should not be employed in these posts.

72. The special civil officer should be directly under the District Engineer, to whom his reports should be submitted; his independence in Berar appears to have caused friction. We recommend that he be ordinarily the officer in charge of the work to which he is appointed. His special duties, apart from general control, are to supervise and arrange for—

- (1) the prompt admission and registration of applicants;
- (2) the classification and treatment of workers and dependants;
- (3) the provision of tools and shelter;
- (4) the correctness and proper payment of the wages;
- (5) the provision of sufficient small coin;
- (6) market arrangements and the supply of food;
- (7) the adequate supply of good water and proper disinfection of wells;
- (8) the hearing and investigation of complaints;
- (9) the adjustment of the task;
- (10) hospital and sanitary arrangements;
- (11) the care of children and of weakly persons presenting themselves at the works;
- (12) the prompt submission of accounts and reports;
- (13) the immediate report to the District Engineer, and to the Collector, of the outbreak of epidemic disease;
- (14) the separation of the weakly from the able-bodied, and the formation of weakly gangs;
- (15) the prompt relief of new comers.

This last duty is most important, for the hardships caused by delay in admitting new-comers have occasioned much suffering.

SECTION VIII.—*Organization on works.*

73. The recommendation of the Commission of 1898, that the number of persons employed on a charge should not exceed 5,000, has been followed generally except in Bombay, and except during brief interludes of disorganization elsewhere. The Government of Bombay were in 1899 disposed to question the desirability of limiting the discretion of the Commissioner in this matter; but events in the recent famine have, we think, completely demonstrated the necessity of having on each large work, compact, self-contained and mobile charges, each with its full establishment; and all experience indicates that the limit to the numbers in such a charge should be about five or six thousand. Indeed, the majority of the Bombay officers whom we examined were in favour of the proposal *per se*, though they were inclined to doubt its feasibility owing to the difficulty of procuring suitable establishments. This difficulty has been overcome elsewhere, and we have already indicated a way to its removal. For all these reasons we desire to renew the recommend-

ation of the last Commission in this vital matter. We attribute to the absence of the charge system much of the idleness in the Deccan, which led to the penal wage of nine *chhatacks*, and much of the panic during the cholera epidemic in Gujarat. To keep the workers up to their work requires the constant efforts of an establishment to whom by daily intercourse, they are accustomed, and the steady control of officials, whom they know, is the only means of averting or restraining panic. In the interests of discipline, of the enforcement of proper tests, of sanitation, of health and of adequate relief, we consider the charge system to be indispensable.

74. The establishment for a charge may vary somewhat in different localities, but the following scale appears to us to be generally suitable; the salaries shown are based on those which prevailed in the North-Western Provinces and Oudh in 1897, but they will necessarily vary according to local conditions :—

No.	Officials.	Monthly salary.
		R R
1	Famine <i>Naiib</i> tahsildar, in charge	50 to 100
2	Work agents	40 to 60
1	Sub-overseer of the permanent staff, Public Works Department.	...
17	Vernacular clerks (or <i>jamadars</i>), including those on water, conservancy and accounts, as well as those in charge of parties.	10 to 15
70-80	Mates or headmen of gangs and on special duties . . . . .	...
1	Storekeeper	12 to 18
1	English-knowing clerk	18 to 25
2	Sub-cashiers	15 to 20
4-10	<i>Chaukidars</i> for the treasure chest, the stores and the market	6
5	Peons	5
4-10	Sweepers . . . . .	...

In addition, at the outset there should always be a certain number of work agents in training, so that the supply of qualified men may be equal to the increasing demand for them.

75. The number of mates or headmen of gangs, who will receive the pay of the special class, will vary, of course, with the size of the gangs; and the size of the gangs will vary to some extent with the character of the employment, and, in earthwork, with the length of the lead. But for purposes of discipline the numbers in a gang should not, we think, be more than 100 nor less than 50; and it may be often advisable that the full number of gangs in a charge should not be made up at the outset, but that more than one skeleton charge should be made up, to admit of the formation of fresh gangs in such charge. In this way it will be possible to meet a rush on the works at the beginning, and so prevent disorganization, which is likely to follow a rush, if the charge commence with the full complement of gangs. It is the general view, and we endorse it, that, so far as may be, members of the same family

or inhabitants of the same village should be "ganged" together, and that the mate or headman should invariably be selected by the members of the gang themselves.

SECTION IX.—*The system on the works.*

76. It may be a truism to say that a full establishment is required for the thoroughly effective working of any system; but a full establishment is specially required for the working of what our enquiries and experience convince us to be the only proper system on relief works. It is no exaggeration to say that the "minimum wage" for able-bodied workers has been the stumbling block of famine administration. No question has come more prominently to notice in the recent famine; and to none have we given a more anxious consideration. The Commission of 1898, while recognizing that the minimum wage might be dispensed with at the outset, and with safeguards, before the pressure had become severe, were nevertheless of opinion that it still was necessary in times of acute distress or actual famine.

77. This opinion has been directly controverted by experience in the recent famine. In the Central Provinces the minimum wage was never introduced except for weakly gangs; in Ajmer it was abandoned as the famine grew more intense; in four districts of the Delhi Division it was never introduced, and it was not required in the fifth, Hissar. Evidence was offered to us as to the success of working without a minimum wage in Kathiawar; and in the Satara district of Bombay a minimum wage, which was introduced for a short time only, more by accident than intentionally it would seem, was hurriedly abandoned on account of the abuses to which it gave rise. In Bombay and in Berar alone was the minimum wage maintained for a long period; and in the former the effect of the evidence was that, if relief were given to dependents, minimum wage would not be necessary. It appears to have been a common mistake in Bombay that the alternatives were on the one hand the Code task system with relief to dependents, and on the other the system of payment by results without such relief. We note especially that in the few cases where the system of payment by results was found to fail, the failure was attributable, not to the system itself, but to defects in the administration of it, which can be detached and removed, *e.g.*, the omission to relieve dependants, weakness of establishment, and in consequence the inability to keep the workers up to their work, irregularity or delay in payment, overtasking, or delay in starting relief. A final argument against the minimum wage is the success which has been attained by systems of pure piecework on village works in tracts of acute famine.

78. It is, then, a matter of experience that the minimum wage can be abolished without an undue risk; and there cannot, we think, be two opinions as to the desirability of its abolition. The evidence of the demoralizing effect of the minimum wage is overwhelming; it is regarded as a form of gratuitous relief; its attractiveness has even won for its terms of endearment among the people, expressive of repose and unconcern. In the Central Provinces, we had evidence of people coming upon some works, already formed in gangs and clamouring for the minimum wage—a striking comment upon and a refutation of the view, which at present seems to find no little favour, that demoralization leaves no traces behind it after the close of a famine. Instances of a similar

character have come to our notice from other parts of India. Except in the Punjab, where establishments were strong and unusually efficient, and where moreover, the people were sturdy and were given a chance of earning a good deal more than the normal wage, or, again, in Gujarat, where the people had a high standard of comfort and their self-respect had not been injured by previous experience of famine, a large proportion of the able-bodied were more than ready to sit down upon the works in idleness or immorality, and draw the minimum wage.

79. Between a scandal of this kind and the scandal of gratuitous relief flung broadcast over the country there is not much to choose, and the scandal will be greater with each successive famine. With a policy involving the maintenance of the minimum wage on the one side, and proved readiness of the people to take advantage of it on the other, we see no limits in the distance to the complete pauperization of large masses of the people. In certain quarters a tendency to such pauperization has already set in; and a false and short-sighted benevolence is, as ever, ready to approve it, or at least to find excuse for it. We recommend the abolition of the minimum wage *for the able-bodied* in all future schemes of relief.

80. Any well considered system of payment by results with a maximum limit to the daily earnings would probably be found satisfactory; one such, known as the Blackwood system, was worked with success in Behar in 1897, and was favourably regarded by the Commission of 1898; but, on the whole, the system which we advocate is that which was evolved in the North-Western Provinces in 1897, was adopted in the Central Provinces throughout the recent famine, and has been known hitherto as the "modified intermediate system." It is a system of pure payment by results, supplemented by relief to dependants, with a maximum limit to daily earnings, *but without a minimum wage*. This system we propose in future to call the *New Code system*. It presents no difficulties in practice if the following conditions are observed:—

- (1) That relief is started in time;
- (2) That the establishment is strong enough to keep the people up to their work;
- (3) That weakly persons are put in separate gangs;
- (4) That there is no delay in admitting new-comers, and that the task allotted to all new-comers, who are unused to work, is, for the first few days, specially light;
- (5) That, generally, the tasks are sufficiently elastic, and that the greatest care is observed in modifying them to suit the different classes of soil;
- (6) That a fixed wage is given on rest days and days when it is impossible to work, as also on occasions when the absence of a worker is unavoidable.

These conditions, we consider, will be amply secured if our recommendations as to the organization of public works are accepted. But in any case there will remain the necessity for constant watching over the earnings and a vigilant outlook for any signs of deterioration. Inspecting officers should devote special attention to the formation of weakly gangs; they should also closely verify the figures of actual earnings, for the overstatement of earnings is as common and misleading a form of fraud upon relief works as the fabrication of muster rolls.

81. In order to secure proper care of weakly persons, nominal muster rolls will always be required. The weakly should, as has been

stated, be placed in separate gangs, and be leniently treated by a reduction of the task. Every effort should be made, in the interests of discipline and of the people themselves, to induce the weakly gangs to do some work; they will best be stimulated to do so by the opportunity of earning the full wage of the able-bodied on the performance of a greatly reduced task; but to those who are unable to perform even a reduced task the equivalent of dependant's dole should be given.

The importance attaching to the formation of weakly gangs is, thus, already showing itself; it will become more apparent as we proceed.

SECTION X.—*Tasks.*

82. The adoption of a system of payment by results will, of necessity, enhance the importance attaching at all times to the tasks, as regards both original pitch and current adjustment. It would serve no useful purpose, and we have not the local knowledge, to analyze and compare the standard task tables accepted in the different provinces; it is only possible to judge by results, and the verdict of results is that, on the whole, and subject to local exceptions, the task were fair. In the Central Provinces they were unduly low, it would appear, at the outset, but were gradually raised. In Bombay, on the other hand, there was a lack of discrimination in the beginning, and the standard tasks prescribed in March were subsequently reduced in certain parts of Gujarat. The experience that has been gained will doubtless be preserved for future use.

83. In respect of the standard, we accept, so far at least as public works are concerned, the conclusion of both Famine Commissions that the task for labourers in class I should be three-quarters of the task commonly performed by labourers in ordinary times. But the reasons given for this reduction do not apply to village works. Moreover, in the case of such works there is no waste of energy in going to and fro; and, although we consider it impracticable to adjust tasks on large works according to the distance travelled by individuals—the attempt was made and failed in the Ellichpur district of Berar—still this saving of energy is an important factor in determining a scale of general application. It is in evidence that in the Central Provinces very high tasks were successfully exacted by *mālguzār*s on village works, and we recommend that on such works the full tasks commonly performed by labourers at the time of year should be required. We accept the proportionate tasks fixed by the Commission of 1898 for classes II and III, *i.e.*, not more than two-thirds and one-third respectively of the task for class I. Such tasks appear to have worked successfully in practice.

84. There remains the question as to the unit to be tasked, *i.e.*, the gang, the sub-gang, or the individual. It is in every way desirable that the individual should be tasked; but in practice, we fear, this may not always be found possible. Nevertheless we are strongly of opinion that tasking should be carried down as near the individual as may be. If on earthworks the digger and attached carriers cannot be tasked—and we think they often can—then we recommend the sub-division of the gang into sub-gangs of from twelve to twenty-five workers, as was suggested by the Commission of 1898 (paragraph 463). But we think that in all cases *new-comers* should be individually tasked, and that for this purpose they should be temporarily placed in specially small gangs, even consisting of only three or four—a digger and his carriers.

In Bombay it was the practice to exempt new-comers from being fined for the first ten days or fortnight after their arrival. The intention was humane, but it was represented to us that new-comers often, in ignorance of their exemption, overworked their strength and suffered in the attempt to do the full task. We were also informed that, in the interests of discipline and in order to accustom new arrivals to life upon the works, it was advisable that they should be given very easy tasks, but should not enjoy immunity from fine. In the New Code system there is no place for fines, and the recommendations to which we have referred will follow automatically. They are, we consider, unquestionably sound. The tasks should be low at the outset, as low as half the ordinary famine-task—it may often be necessary to go even lower,—and should be *gradually* raised as the new-comers improve in dexterity and physical condition.

85. Our enquiries elicited the fact that great practical inconvenience resulted from the recommendation of the Commission of 1898 that working children should not be fined. To give effect to this recommendation it was necessary either to task them separately or to punish the adults in the gang for the idleness of working children. In practice there is reason to believe that often working children were no more exempted than the rest of the gang; and in any case this difficulty will not recur in the future if, as we shall strongly recommend later on, the immunity of working children is withdrawn.

86. Difficulty was also experienced in allotting the task when diggers or carriers were greatly in excess of the ordinary proportion. The conclusion of the Commission of 1898 that a digger employed in carrying should be given a task 50 or 100 per cent. higher than the ordinary task of a carrier and get the digger's wage, and, conversely, that a carrier employed in digging should be given half the task of a digger and get the carrier's wage, was carried out and apparently worked well. But to task an individual, as in the former case, at more than an individual's task is likely in practice to throw the excess upon the gang as a whole, especially when the tasks are measured up for the gang; and although diggers are rarely in excess of the carriers, and this difficulty, therefore, but rarely occurs, we think that in practice the disproportion will best be met where this is feasible, by an alteration in the "lead."

87. There remain the current adjustments of the task, without which, we think, relief will never exactly correspond and be adequate to distress. Indeed, we think that the regulation of the task should take a far more prominent place than it has done hitherto in the direction of relief and in the volume of it. It is obvious, for instance, that the tasks should be reduced on the appearance of any general signs of deterioration, particularly in the hot weather. It would be equally important to raise the tasks if the people were in good condition, but clung to the works after field work or other employment had become available. Such action was taken with success in Berar and at different times in all the provinces, but there is still room for a further extension of it. To be on the safe side, it will, we think, be well to require the sanction of the Commissioner to such adjustments of the task; but we consider that the risks involved are small, *provided always that weakly persons have been placed in separate gangs*. This is the key to the whole position; until this has been done, the hands of the Administration are tied, and its efficiency is impaired.

SECTION XI.—*System of measurement and payment.*

88. The isolation of the weakly gangs is not, however, of itself sufficient; equally imperative, in our opinion, is the introduction of a system of daily measurements and payments. The Commission of 1898, while hesitating to recommend that the system of daily payments should be made universally obligatory, were "impressed with the fact that wherever it has been in force, it has been approved with absolute unanimity by all the officers, both Civil and Public Works, concerned, both on account of its popularity with the workers, and the security that it provides against fraud" (paragraph 457). Experience in the recent famine has been similar; and the procedure, which is desirable under a system with a minimum wage, becomes almost a postulate of the New Code system, which we recommend.

89. When tasks are allotted to a gang, it is difficult enough, even with the help of daily measurements and payments, to differentiate in individual cases idleness from inability to work; it becomes impossible when payments are deferred for several days, for all distinctions are then obliterated, and, in consequence, the whole gang may suffer for the faults or the weakness of a few. There is nothing more demoralizing than vicarious punishment; and demoralization leads through depression direct to physical deterioration, or to desertion and despair. Even where the task is carried nearer to the individual, it is impossible, without daily measurements and payments, to exercise the close control, which is one indispensable condition of success. For experience shows that on public works the labourers stand in need of constant stimulus and encouragement; if left to themselves for even a few days, they will enjoy idleness for the time and at the end accept privation as if it were inevitable.

90. Moreover, deferred payments on public works involve a considerable reduction of the wage, by forcing the workers to live upon their credit either with the *bania* or with the headman of the gang; and the terms of such accommodation are usually hard; on account of the numerous bad debts that are incurred. There is evidence that such was the case in Bombay and, up till May 1900, in Ajmer.

91. We would go further, then, than the Commission of 1898, and advise that daily payments on public works be made "universally obligatory." On village works the same considerations do not apply, for people live under ordinary conditions of life and of credit; and a daily wage is not, in our opinion, necessary, though it is, of course, an advantage even on such works.

92. Nor has it been found that there is any insuperable difficulty in carrying out the system. Daily payments were managed with success in the Central Provinces and Berar, and were successfully introduced in Ajmer after experience of the evils of deferred payments. In the Punjab payments twice a week were the rule, but the disadvantages of deferred payment were counteracted by the efficiency of the staff, the regularity of payment, and the sturdy character of the people. In Bombay the payments were made weekly, and were sometimes weeks in arrears from want, it would seem, of a proper organization. The necessity of daily payments in the case of new-comers and aboriginal tribes was, however, recognized in Bombay after proof of the injurious effects of the other practice; and many Bombay officers have given their approval to

the theory of daily payments, though they are doubtful as to their practicability. We cannot admit that what has been found practicable elsewhere is impracticable in Bombay; and it seems to us worthy of remark, in this connection, that rough daily measurements were often, if not generally, made in Bombay, although the calculation of the wages was not based upon them.

93. This question of measurement is an integral part of the question of payment, because under the New Code system there can be no fining. Payment under that system is made for the work actually done, and, if no work is done, it follows that no payment will be made. At the same time we recognize the dangers arising from the blind adherence to rigid rule which characterizes subordinates on public works, and to meet this, and to make allowance for occasional failure to accomplish the full task, we recommend a reasonable margin in measurement. In the North-Western Provinces Code a margin of $12\frac{1}{2}$ per cent. is allowed, and this margin, which is convenient, as representing two annas in the rupee, was ultimately adopted with success in Bombay. We would add that this concession is not intended to protect contumacious idleness from its legitimate consequences, and we think that the Commissioner should have power to withdraw the allowance of the margin if he is satisfied of the existence of general contumacy.

94. The Commission of 1898 recommended that working children should not be fined. This recommendation, as we have already pointed out, has led to inconvenience where it has been acted on, and strong opinions have been given to the effect that working children ought to suffer for their idleness. Such children are frequently a nuisance on the works, and if they are permitted to play about and draw a full wage the nuisance becomes a scandal. We propose, later on, to raise the age limits for working children, and we also propose for them a higher wage than the Commission of 1898 had in view, and in these circumstances we strongly recommend that they should be placed in the matter of earning their wage on the same footing as adults. If they are not able to work, or if they deteriorate in condition, the proper course is to transfer them to the class of dependants.

95. It remains to consider whether payment should be made in cash or in grain, and to the individual or the head of the gang. All experience suggests that cash payments are greatly to be preferred as the general rule, although the advantages of paying aboriginal and forest tribes in part by grain, as recommended by the Commission of 1898, have been in some cases realized in the recent famine. It is also conceivable that in other special circumstances payments in grain might become necessary, as a temporary measure, or in particular localities. Again, there can be no doubt whatever that payment to the individual is in every way desirable; and, if this be not practicable, that payment should be made as near down to the individual as possible. Payment will follow the allotment of the task, and we have already advised that tasks be apportioned to small sub-gangs. It is scarcely necessary to remark that, where joint payment is made, it should be made in the presence of all members of the gang or sub-gang, to a representative chosen by themselves from their own number.

96. Finally, we would note the existence of a very strong feeling, particularly amongst the non-official classes, that a much closer scrutiny

should be exercised over payments generally. An experienced Collector went so far as to say that an officer of the rank of a *mamlatdar* should be appointed on all public works in order to supervise the payments alone. This is a counsel of perfection, but we share the feelings which prompted it. The practical remedy is to strengthen establishments and to improve the supervision of them.

SECTION XII.—*The Wage Scale.*

97. To avoid misunderstanding, we will first recur to the fundamental principle of the famine wage. This principle was laid down in paragraph 28 of the Government of India's Circular No. 44F., dated the 9th June 1883. The passage runs :—

The principle upon which the Government of India has framed the scale of wages embodied in the Code is that the wage should be the lowest amount sufficient to maintain health under given circumstances. While the duty of the Government is to save life, it is not bound to maintain the labouring community at its normal level of comfort. To do so would be unjust to other sections of the community, besides prolonging the period for which the labouring population would cling to the relief works.

The alternatives, it will be seen, are the *maintenance of health* and the *maintenance of the normal level of comfort*; the former was deliberately chosen to the exclusion of the latter. We have no doubt whatever that the range of famine relief should be strictly confined to the maintenance of health, and we accept without any reservation the principle laid down in 1883.

98. It is necessary, we think, to insist upon this principle, because false benevolence is at all times ready to drift into laxity and extravagance, and because many, whose attitude is ordinarily steady, are apt to swing uneasily at their moorings in the presence of acute distress. For instance, the Commission of 1880 expressed a distinct opinion that a margin for saving should not be allowed (paragraph 131); and the Commission of 1898 appear to have been of the same opinion, although statements not wholly consonant with it could be gleaned from their report; nevertheless, we have found, in the course of our enquiries, that in several quarters the view is entertained that it is a positive advantage to provide the workers with the means to save. A similar sentiment appears in the suggestion that saving is inevitable, and that in consequence it is as well to give a high wage in order to prevent the saving from being effected at the cost of subsistence. These laxer views are, in our opinion, not only erroneous, but inconsistent with the first principles of famine relief.

99. The Commission of 1898 departed from the wage scale previously in force; but we find some difficulty in arriving at a clear appreciation of the reasons which induced them to do so. It is certain, however that the scale which they adopted was considerably higher than the one it displaced; and experience in the recent famine has afforded conclusive proof that it was unnecessarily high. In every province one or other item in the scale has been reduced, while, to meet the undue attractiveness of the famine wage and the savings effected on it, the whole scale has been lowered in some provinces by conversion of the grain equivalent to cash at a price much lower than the actual market price. There is a mass of opinion that, even after this reduction, the scale was still excessive, and this opinion has been fortified by solid fact.

100. In the Central Provinces, for example, "free but not full resort was made to the device of lowering wages by the adoption of fictitious prices, and the net result both of this device and of fines for short work was that diggers earned on an average something above a carrier's wage, while carriers earned something over a minimum wage." A statement has been prepared for us expressing the earnings of all workers in terms of the class I wage. It appears that over the whole province 89 per cent. of the full task was performed, and that the wage actually earned was the equivalent of 15·5 *chhatáks*,* *i.e.*, 82·6 per cent. only of the full wage adopted, *viz.*, 19 *chhatáks*, and only 77·5 per cent. of the corresponding wage of 20 *chhatáks* recommended by the Commission of 1898. Yet the mortality on the works in the Central Provinces, during the whole period of famine, was only 21·6 per mille of the average numbers attending, including dependants of all ages,—a figure considerably below the normal death-rate of the province. Similar statements have not been prepared in other provinces, but the general effect of the evidence is overwhelming.

101. In Gujarat alone is the opinion generally held that the wage adopted was not excessive; but this opinion is clearly prompted by considerations which do not affect the scale. In Gujarat a higher wage was needed than elsewhere, because for the most part the people came upon relief too late, and consequently in bad condition: this was a reason for special treatment till their strength was restored, but it is no argument against a scale which aims at keeping healthy men in health. We have no hesitation in accepting the conclusion of the Commission of 1898 that "the differences between the dietary requirements of famine relief in the various provinces are not great enough to make different standards of ration and wage necessary," and we think that a wage which is found to be sufficient elsewhere would be found sufficient under ordinary conditions in Gujarat.

102. Indeed, there is no little evidence in favour of a lower scale than has ever yet been considered reasonable in British India. In Native States, we understand, a wage on a level with the British minimum wage was found sufficient, when paid daily and in grain, to keep the workers in fair health under ordinary conditions; and we have been assured on high authority, European and Native, that the scale, which we recommend, will be considered as excessive in Native States. In British territory large numbers remained in good condition for months together on the minimum wage. There is evidence that even on the reduced minimum of 9 *chhatáks* there was little or no deterioration so long as little or no work was done; but we consider this evidence incomplete, and are not prepared to accept the view that the 9 *chhatáks* wage is a sufficient subsistence wage for any length of time, even when received in idleness. It was abandoned at the beginning of the hot weather in Berar, but it was maintained until a later date in Bombay. We recognize the difficulties, with which the Administrations had to cope in the Deccan, where alone this reduced minimum wage played any part, namely, the insufficiency of the establishment, and the idleness and demoralization of the people; but, nevertheless, we are unable in any circumstances to approve the retention of so low a wage, except by way of punishment and for a short time only.

* A *chhaták* is one-sixteenth of a *sér* and is equivalent to two ounces avoirdupois.

103. Even if facts and figures of this kind point to the possibility of a substantial reduction in the wage scale, there is, on the other hand, a counter-balancing consideration, to which great weight is due. All the evidence is to the effect that, while the wage is excessive for families coming on the works together, it is not so excessive for solitary individuals. The explanation of this is that, apart from the allowance for condiments and fuel, included in the ration on which the wage is based, a very liberal margin, amounting to one-tenth of the whole, is allowed in the individual wage; a margin excessive, as we think, in the case of an individual and of still greater generosity when the wages of several individuals are combined. It would thus appear that the more people come in families upon the works the more generous is the ration—a generosity which is accentuated if the same ration be given to the female members of the family as to the males. But it is not possible to fix a family ration.

104. All these considerations must be borne in mind; but, before making our recommendations about the wage, it is necessary to discuss two points of great importance in the classification of the labourers: (1) the question of a sex distinction; and (2) the age limits of working children.

105. *Sex distinction.*—The differentiation of wages by sex, which was originally recommended by the Famine Commission of 1880, was only abolished, and that without much detailed discussion, on the recommendation of the Commission of 1898. The arguments in favour of the abolition of the sex distinction are—

(a) the greater simplicity, which avoids—

(1) much labour,

(2) much fraud;

(b) the fact that the classification of diggers and carriers practically secures the advantages of a sex distinction.

On the other hand, the arguments in favour of its retention are—

(c) the universal custom of the country, which allots a much lower wage to women than to men;

(d) physiological fact, women requiring less food than men;

(e) considerations of economy;

(f) the fact that a sex distinction alone can reduce the extravagance of the rations earned by a family.

106. We consider it necessary for purposes of control and discipline to enter details of sex in the muster rolls, and, if this be done, the saving of labour is reduced to the saving in the course of actual payment alone. We do not consider that experience in the recent famine warrants the belief that greater simplicity of system was attended by less fraud; while the lesson of general experience is that one must look to elaboration for protection against fraudulent practices. Again, the distinction of diggers and carriers as a sex distinction is imperfect on earthworks and still more imperfect in the case of metal-breaking, while, if pushed to its logical conclusion, it dispenses with considerations of employment altogether. It has, no doubt, been represented that women ought to get the same wage as men because they have household duties, such as grinding and cooking, to perform; but the suggestion is refuted by the

custom of the country. Finally, it has been urged that the financial interests involved are small because the difference of one *chhaták* in the carrier's wage vanishes on conversion to cash at several price scales; but we shall meet this argument by a definite proposal hereafter, and in any case it entirely overlooks the substantial economy in the case of the dependant's dole: we have no doubt, though precise calculation is impossible, that the issue involves the expenditure or the saving of many lakhs of rupees in a large famine. In so far, then, as the question is resolved into a balance of a certain convenience against financial and disciplinary interests, we are of opinion that the latter ought to prevail. And we attach much weight to the consideration that in famine relief administration no avoidable step should be taken, which conflicts with the custom of the country, or might tend to disorganize the labour market. Differing therefore from the Commission of 1898, but agreeing with that of 1880, we recommend that a sex distinction be adopted.

107. *Age limits of working children.*—For reasons given in paragraph 444 of their report the Famine Commission of 1898 classed as adults all children over 12 years of age. We think that this limit is too low. We are unable to agree that on physiological grounds a working child over 12 years of age is in need of the same ration as a full grown working woman. Moreover, it is opposed to the custom of the country, and involves an altogether unnecessary expense. We would class as adults only those children who are over 14 years of age. On the other hand, we would raise the lower age limit of working children to 10 years. There is a strong opinion that children are a nuisance on the works and only get in the way; indeed, it has been suggested to us that children should be eliminated from the ranks of the workers altogether. We are not prepared to adopt this suggestion, which, also, is opposed to the custom of the country, but we think it desirable, in the interests of discipline and of the children themselves, to eliminate young children of less than 10 years of age. The age limits for working children would then be 10 and 14 years, and these limits have been found satisfactory wherever they have been tried. Of course the classification of children is, in practice, made on their physical appearance, their ages not being known, and the limits laid down in the Code are merely a guide to classifying officers.

108. The raising of the lower age limit for working children necessitates the re-classification of non-working children for the purposes of the dole. The Commission of 1898 took 5 years as the dividing line. We would prefer to put it at 7 years, which is the limit of the revised Code for the North-Western Provinces and Oudh, and which was adopted and was found to work satisfactorily in the Central Provinces during the recent famine.

109. With these reservations we accept the classification recommended by the Commission of 1898. There remains the determination of the appropriate wage for the several classes. This question may now be said to have passed beyond the speculative or the experimental stage. Results are in evidence, and, with results to aid us, it would be waste of time to re-examine the constituents of the so-called famine ration. It will be enough to apply the test of results to each item in the scale.

110. *The Special Class.*—The Commission of 1898 recommended for this class a wage which should exceed the wage of class I by a constant difference. This excess has generally been placed at two pice; in Bombay it was placed at 25 per cent., which was substantially the same. It was found in the Central Provinces that the allowance was an inducement to persons, who were not in need of relief, to seek employment as mates; the allowance was accordingly reduced to one pice, and this was found to be ample. In other provinces it has been noticed that the post of mate is unduly attractive, and we recommend that, in future, the allowance be generally limited to one pice.

111. *Class I.—Diggers.*—The digger's wage was raised by the Commission of 1898 to 20 *chhatáks*; but after a brief trial the increased wage was abandoned as excessive in some provinces, while in others it was never tried at all. The wage adopted generally after a little experience was 19 *chhatáks*. In the Punjab, however, a wage of 18 *chhatáks* was in force, except during the coldest season of the year, and proved sufficient. At a very early period the undue liberality of the wage scale attracted the attention of the Chief Commissioner of the Central Provinces, and as the result of his enquiries, he came to the conclusion that 18 *chhatáks* was a sufficient wage. There is abundant evidence on all sides in favour of this wage. Some witnesses would even go as low as 17 *chhatáks*, but we think that for an individual in hard work 18 *chhatáks* is not an excessive wage; and this is what we recommend for a male digger. Female diggers are few. We think that they should be given only a half task and should draw the wage of the male carrier, *i.e.*, 14 *chhatáks*.

112. *Class II.—Carriers.*—The Commission of 1898 raised the carrier's wage to 15 *chhatáks*. This has been generally found to be excessive, though it was maintained in the Central Provinces and Bombay. In Ajmer and Berar a wage of 14 *chhatáks* and in the Punjab a wage of 13 *chhatáks* for carriers of both sexes proved sufficient. A scale of 14 *chhatáks* for a male and of 13 *chhatáks* for a female was found to be ample in the North-Western Provinces in the 1896-97 famine; it is fully justified by physiological requirements; and, with this recent confirmation of its adequacy, it ought, we think, to be generally adopted.

113. Inasmuch as the difference of one *chhaták* is on the majority of price bases one pice, but disappears in the course of conversion of the wage into a round number of pice on one or two price bases, it would probably be found convenient in practice to pay female carriers one pice less than male carriers on all price bases.

114. *Class III.—Working children.*—The wage of the working children depends upon the age limits that are fixed for them. The Commission of 1898, with an age limit of 8 to 12 years, fixed a wage of 8 *chhatáks*, with the proviso that working children should not be fined. The Bombay Government, with an age limit of 8 to 12 years, at first preferred a wage of 12 *chhatáks* with unlimited power of fining, but ultimately adopted one of 10 *chhatáks*. This wage was also adopted, with the age limit of 10 to 14 years, in Ajmer and Berar and, we understand, worked well. In the Punjab the classification and wage of the Commission of 1898 were followed. In the Central Provinces, with an age limit of 10 to 14 years, a wage of 8 *chhatáks* was retained. The Chief Commissioner

was of opinion that, as the wages of a family were always put into a common stock and the individual thus never got precisely the ration corresponding to his wage, it was not necessary to give the working child more than 8 *chhatáks*. We recognize that the argument is weighty, in view of the fact that the ration for the family will always be extravagant. But, as we have already said, it is not possible to fix a family ration. And we note that in the Central Provinces, as, indeed, elsewhere, there were complaints that the children looked thin. We consider that it is not safe, with the age limit we propose, to give a working child less than 10 *chhatáks*.

We would add that, if the appearance of the working children suggests that they have not been receiving their full share of the family meal, they should be paid for a time, at any rate, by means of cooked food.

115. *Class IV.—Adult dependants.*—The minimum wage will disappear under the system which we recommend, but it is necessary to fix the dependant's dole, which has hitherto been the same as the minimum wage. In all provinces except the Punjab, where a dole of 10 *chhatáks* prevailed, the dependant's dole was fixed at 12 *chhatáks*. As however, dependants on the works were given cooked food, the application of this dole was only partial. We recommend the adoption of the old scale of 12 *chhatáks* for a male and 10 *chhatáks* for a female. There is much to be said in favour of a dole of 11 *chhatáks* for a man and 9 *chhatáks* for a woman: but the dependants are usually weakly, and the scale should err, we think, in their case, on the side of liberality. Moreover, the dependant's dole will be the measure of the rest-day wage, and will be often given, it may be expected, to new-comers on first arrival, and to members of weakly gangs. For such, the scale we recommend is not excessive.

116. *Class V.—Non-working children.*—There are three classes of non-working children, for whom separate doles are required:

- (a) children of the age of working children, *i.e.*, 10 to 14 years, but unfit to work;
- (b) children of 7 to 10 years;
- (c) children below 7 years.

And for these we recommend the doles laid down in the revised Code of the North-Western Provinces, which worked successfully in the Central Provinces during the recent famine; namely, 8, 6, and 4 *chhatáks* respectively.

117. There only remains the case of infants in arms. When the mothers of these are workers, there is no difficulty; the mother receives an additional pice, with, if necessary, special treatment. But when the mothers are classed as dependants and relieved by doles of grain or by cooked food, it is necessary to give the dole for the infant in the form of an additional ration. To give this additional ration, as was done in the recent famine, at the rate of the dole for the youngest class of non-working child (*i.e.*, 5 *chhatáks* on the scale of the Famine Commission of 1898), means giving the working mother less than the non-working mother for the support of her child. This anomaly ought, we think, to be removed, and we recommend that where the additional ration for an infant is given in grain or in cooked food it should be fixed at 3 *chhatáks*.

the grain equivalents are converted. This important duty was in the recent famine generally entrusted to the District Officers, and often devolved in practice on the officer in charge of a work. Such laxity led in many cases to a most extravagant wage. Instances were found where the wages were calculated on a basis two or even three *sérs* dearer than the prices actually prevailing near the work; or, again, inflated and fictitious prices on the works were made the basis of conversions.

122. The wage scale, which we recommend, like the wage scale of the Commission of 1898, includes a margin to cover "the difference which often exists between bazaar rates and the price which the relief worker has actually to pay." The basis of conversion should be the price prevailing in the nearest bazaar of the cheapest grain in common use, not flour, but grain cleaned for sale.

123. It is desirable that this price basis should be so fixed in every case as to avoid any competition between adjacent districts, which leads to wandering. The knowledge of District Officers in this matter is necessarily local; and accordingly we are strongly of opinion that the price basis should, in future, be fixed by the Commissioner (in Madras the Collector, as there are no Commissioners in that Presidency) for every district, or for any large area in a district where peculiar local conditions exist. The Collector should, however, be authorized to meet any sharp and sudden variations in market prices by altering the basis within a limit of 20 per cent., reporting his action by telegram to the Commissioner. Small variations in prices should not be regarded as a ground for altering the basis of conversion. All changes should be notified to Government in the periodical reports; and the periodical returns should show both the prices actually current and the prices accepted as the basis of conversion.

The Commission of 1898 recommended that discretion should be given to Local Governments to vary the prices 25 per cent. above or below the market price. We do not think it desirable to limit the discretion of Local Governments in any way, provided that they keep the Government of India duly informed of what they do.

124. There remain three questions connected with the wage which we have kept to the end :—

- (a) We agree with the Commission of 1898 that a considerably lower wage should be given on village works, because experience shows that people can live on less at home than elsewhere.
- (b) Wages were raised in the Punjab during the coldest months of the year, and the question arises, whether similar action should be taken elsewhere. We are not convinced of the necessity of this action in the Punjab; we are certain that it should not be repeated in other provinces, where the cold is less severe.
- (c) Finally, it remains to consider whether in any circumstances it should be possible to earn more than the full wage. This concession could only be legitimate when designed to take the place of relief to dependants, and as such it is open to the following objections :—

- (1) that there is no control over relief in this form;

- (2) that those without dependants get excessive relief;
- (3) that those with many dependants may get insufficient relief;
- (4) that the relief may not reach the dependants. This was the case on a small scale in one of the Punjab districts, where it was found necessary to open kitchens for weakly dependants in addition to granting the power of earning an extra wage.

We are therefore of opinion that excess earning should not in any case be allowed.

SECTION XIII.—*Gratuitous relief.*

125. The following tabular statement exhibits the extent to which in the recent famine relief was administered gratuitously in each province :—

Province.	TOTAL NUMBER OF UNITS RELIEVED.			Percentage of gratuitously relieved to total relieved.
	In all ways.	As workers.	Gratuitously in any way.	
1	2	3	4	5
Central Provinces	555,875,946	253,038,583	302,837,363	54.48
Berar	106,973,073	69,831,008	37,142,065	34.73
Bombay	385,188,987	245,550,215	139,638,772	36.25
Ajmer	37,991,189	25,822,132	12,169,057	32.08
Punjab	49,322,294	31,554,075	17,768,219	36.02
TOTAL	1,135,351,489	625,796,013	509,555,476	44.88

126. The Commission of 1898 pointed out that 42 per cent. of the whole volume of relief in the famine of 1896-97 was gratuitous, and regarded this development—particularly in the form of relief in the homes of the people—as the distinctive feature of that famine. In the recent famine the numbers gratuitously relieved exceeded 44 per cent. of the whole; but this high average percentage is due to the enormous dimensions to which this form of relief attained in the Central Provinces.

127. There is no branch of famine relief administration in which it is more difficult to hit the happy mean than gratuitous relief. Difficulties beset the famine officer's course on both sides. Doubtless, if famine is, by mismanagement, allowed to make much headway, there is nothing for it but to save life at the sacrifice of other considerations: but even if gratuitous relief is begun in time, there is difficulty in deciding how far it is right to go. This difficulty is enhanced by a tendency on the part of the public to regard profuseness in this kind of relief as a venial fault. We regard this tendency with much concern, for, in truth, the fault is not a venial, but a very grave, fault, being akin to that most dangerous popular vice—the disposition to force the Government to grant public charity.

128. We have already had occasion to express incidentally our views regarding the administration of gratuitous relief in some provinces. We think that in the Bombay Presidency, especially in Gujarat, the distribution of gratuitous relief in the homes of the people began too late, and ended in being profuse. A serious defect in the famine administration of Ajmer proper was the omission to give gratuitous relief to helpless people in their villages. On the other hand, in the Central Provinces the administration of gratuitous relief attained proportions which were beyond reason and should not be repeated. Without desiring to lay down any hard-and-fast-rules, we think, as the result of our own experience and our examination of the records of past famines, that with good administration the numbers gratuitously relieved during the dry months of the year ought not to exceed one-third of the whole. But in the rains the numbers on works dwindle away, while the need for gratuitous relief increases; and, therefore, no proportion can, in the rains, be maintained between the workers and those in receipt of gratuitous relief. Taking the whole period of a famine, we are disposed to think that in no province ought gratuitous relief to exceed the average proportion (42 per cent.), to which it attained during the famine of 1896-97.

129. The necessity for gratuitous relief must be judged by an entirely different test from that applicable to other forms of relief. Other forms of relief are appropriately regulated by a *self-acting test*, a labour test, a distance test, a residence test,—all of which are practicable, though all may not be advisable; but gratuitous relief can properly be regulated by *personal selection* alone. Every *self-acting test* that has been tried has broke down.

130. The following heads comprise the main forms under which gratuitous relief is administered, and under which it may be most conveniently considered :—

- (a) relief of dependants on works;
- (b) poor-houses;
- (c) village relief by doles;
- (d) kitchens.

131. *Relief of dependants on works.*—We have already recommended that this relief should be started directly the test works are converted into relief works. It should take the form of cooked food or a cash dole, and we agree with the Commission of 1898 that the form should be left to the discretion of Local Governments. Dependants are, no doubt, an impediment to discipline on the works, and the Collector should have discretion to return them to their villages and put them on the dole there, when their presence on the works is a serious inconvenience. This, we think, might, with advantage, have been done in Hissar, where whole villages were deserted, and where the dependants represented 35 per cent. of the total numbers on the works. If children are allowed to remain on the works, they should be relieved by cooked food, and such dependants as are guardians of these children should remain to look after them.

132. It may happen that people claiming to be dependants, but unconnected with the workers, come on to the work in large numbers without real need of relief. In this case the principle of selection should

be strictly enforced; village officers and landowners of the adjacent villages should be utilized to check the numbers of dependants actually on the works and eliminate and send home those who are not entitled to relief. It may be even desirable to carry still further the principle of selection for dependants and to allow them admission to the works only on production of an order for it; and as establishments and organization improve, this may become practicable.

133. We consider that in the case of village works there is no need of relief for dependants, since all those who are eligible for it will in the ordinary course be brought upon the village gratuitous relief list.

134. *Poorhouses.*—The objects of poorhouses, and their place in the scheme of relief, have already been indicated; we desire now to make a few suggestions for their management. This will not ordinarily, we think, be efficient unless some limit is placed on the number of inmates. The largest number that has come to our notice was reached in the case of the Ajmer poorhouse, where the maximum attendance was close on 3,400 persons. This number is, in our opinion, far too high, though in a place situated like Ajmer an exceptionally large poorhouse is, no doubt, required and can be successfully controlled. As a rule, for reasons of discipline and health, we consider that a poorhouse should not accommodate more than 500 persons at the outside. As the months pass on, a certain amount of pressure may be required to induce people to remain in poorhouses; and we consider that the Resolution of the Government of Bombay to this effect was a commendable exercise of authority in the cause of humanity. Much was done, particularly in Bombay, where there was most need, to supplement the rations for those who were ill, and no further recommendations in this respect seem called for. The successful management of poorhouses is one of the most difficult tasks of famine administration; and we are glad here to recognise the praiseworthy assistance given by the missionaries in the management of poorhouses in Gujarat. Non-official agency has already given much assistance in this matter, and it may be hoped that, on a future occasion, a still further employment of it will be possible.

135. *Village gratuitous relief.*—We are distinctly of the opinion that early attention to this part of the relief scheme saves expense and suffering later on. If wages on relief works are reduced to a bare subsistence, it follows that indigent dependants who cannot come upon the works, must either starve, or be helped by their friends on the works at the cost of suffering to the latter. We therefore repeat that at the first indications of approaching pressure lists should be made out of the persons eligible for gratuitous relief. The categories of such persons are based on the terms of the Provisional Code, and vary but little in the different provinces; and experience has proved, we think, that they are, on the whole, comprehensive enough. In Gujarat the provisions of the Code were not acted up to for many months; and we agree with the Deputy Sanitary Commissioner in attributing to this cause much of the great mortality which occurred there. Again, there was practically no village relief in Ajmer proper. But these defects were defects of administration, not defects of the Codes.

136. In the preparation of the lists we think that more reliance should be placed upon non-official agency. We recognize the tendency

of such agency to profusion on the one hand and to neglect on the other, the former tendency being the more common. Strict supervision and control will undoubtedly be required; but we have observed that all who have made trial of non-official agency, under conditions of proper supervision, are strongly in favour of employing it. The political and administrative uses of associating non-official agency with the Government in this as in other branches of famine relief are obvious. It is unreasonable, we admit, to expect, from such agency by itself, any high standard of perfection but at least it is equally unreasonable to reject the services of a valuable ally, when, as in many districts of Bombay, the subordinate official agency failed to do its work. The attitude of some of the Bombay officers in this matter would suggest forgetfulness of the fact that men rise to their responsibilities, and that opportunity develops character. Nor is this attitude confined to Bombay. We feel confident that more might have been done to utilize such agency in other provinces.

137. As to the form that village relief should take, the Commission of 1898, on the whole, preferred a dole in grain, and, where this can be easily managed, there is much to be said in its favour. But, when the dole is given in grain, Government, by implication, undertakes the responsibility of supplying the grain in the event of failure on the part of private enterprise; a responsibility which, in parts of the Bombay Presidency where there either were no *bantias* or the *bantias* had fled in terror, it was unable to fulfil. A difficulty of the same character, though in connection with the supply of grain to kitchens, was experienced in the Central Provinces. We think that Local Governments should have discretion in the matter, but on the whole the balance of the evidence appears to us to incline to the side of a cash dole.

138. In whatever form the dole be given we would insist on the necessity of regular payment at short intervals and under constant check. This is required alike in the interests of the recipients and to prevent fraud in the way of double relief.

139. *Kitchens*.—The word “kitchen” appears to have been adopted into the vernacular; and certainly in no previous famine were kitchens employed in anything like the same degree. They rose into favour as importing a test of distress and, when in the Central Provinces the test completely failed, they remained in favour, or at least in prominence, by stress of the inexorable law of famine administration that a fundamental error, once made, can never be retrieved. There are two classes of kitchens—those on the works, and those in the villages,—but the management in both cases is essentially the same. As a means of affording relief to dependants, and when not allowed to become in effect poorhouses, kitchens on the works—where they were generally in charge of the Special Civil Officer—were, we think, attended with a fair measure of success. But when they supplanted or collided with gratuitous relief, and when they degenerated into ill-regulated poorhouses, they took a new departure, with unfortunate results. The issue will be made clear by a comparison of the merits of the dole and the kitchen system, and to this we now proceed.

140. It is necessary, first, to repeat that, whether the relief be given by dole or by cooked food, the distribution must rest on the principle of

individual selection. The attempt has been made to introduce some sort of test, and the attempt has signally failed. In Bombay this attempt took the form of making candidates for relief go considerable distances to a Public Works kitchen for a meal of cooked food instead of giving doles at their homes. The order was carried out with a certain want of intelligence, and in one district at least the people entitled to gratuitous relief—and therefore presumably unable to work—were expected to travel to a kitchen if they lived within eight miles of it. The action of the local officers in this case was condemned by the Bombay Government, but it illustrates the dangers of the test. Generally it may be said, the test failed as a test; and we may add that, in our opinion, it conflicts with a fundamental principle of relief, namely, that weakly persons should be withdrawn from the works, where they are an impediment, and be sent to their homes for relief.

141. Still less successful was the kitchen test adopted in the Central Provinces. At first, indeed, there was some small reluctance on the part of some people to take cooked food, but it did not last long; and, when it broke down, every barrier simultaneously gave way. It is now generally admitted by the officers of the Central Provinces that personal selection is as necessary for kitchens as it is for village relief.

142. This conclusion deprives the kitchens of the principal advantage expected from them, namely, the enforcement of an automatic test of distress; while the disadvantages attaching to them remain. To begin with, they are more costly than the dole. Then, again, it is practically impossible to secure proper sanitary arrangements at them; of this we heard several complaints. There was also a mass of opinion to the effect that the consumption of a heavy meal of ill-cooked food materially affected the health of the people; and the exposure involved in going to and from the kitchens in the rains is generally regarded as a contributory cause of mortality. There is difficulty always about cooks, and often about the supply of grain. The people will, of necessity, cook their own food better than it will be cooked for them, and with some small remnant, it may be argued, of self-respect. All these reasons tell heavily against kitchens. It has also been represented to us that they are more exposed to fraud than the village dole. Non-official opinion is almost unanimous, we gather, in favour of the dole. It is possible to have doles without kitchens, but impossible to have kitchens without doles; for those who are unable to go to kitchens must in any case receive a dole. We are, then, strongly of opinion that gratuitous relief is in every way more efficiently and successfully administered by doles in the homes of the people than by means of cooked food at kitchens: and in any case we consider that kitchen relief, as a general system, is entirely unsuitable in the rains.

SECTION XIV.—*Rains Policy.*

143. In the rains the possibility of a self-acting labour test fades away, while the necessity for gratuitous relief for the weak and helpless reaches its maximum. These two conditions differentiate the famine policy suitable for the monsoon period from the policy with which we have been dealing in our preceding remarks.

144. In the interests of the country at large, the main objective of the policy for the rains should be to secure the re-establishment of ordinary agricultural conditions. There is general agreement that, as the hot weather draws to its close, the people, if employed on large public works, should be dispersed over small public works near their homes and village works. There is also general agreement that before the rains break, and in time for the prudent use of the money, large *taqávi* advances for cattle and seed should be given, and Charitable Fund donations should be distributed. But at this stage differences of opinion come in, as to whether or not it is desirable to actively induce people to return to their ordinary avocations. The Commission of 1898 objected on general grounds to the policy of inducing people to leave relief works before a famine is ended. They, however, appear to have qualified that objection by admitting that people might be induced to leave the works at the beginning of the monsoon, provided that the necessary pressure was used with the greatest caution and safeguarded by a large extension of gratuitous relief. We consider that, with reasonable caution and effective village inspection, the policy of inducing the people to return to their homes and fields, when the monsoon has declared itself, not only involves no risk, but is necessary, if due control is to be maintained during the rains; and we think that the results of the action taken in the various provinces during the rains of 1900 lend support to this view.

145. The programme of relief for the rains in the Central Provinces followed the last Commission's qualified policy, but exaggerated the qualification. There was to be a considerable expansion of village works in the hot weather; suspensions of revenue were to be made at an early date; and all the money that could be obtained under the Loans Acts and from the Charitable Relief Fund was to be quickly distributed. On the 20th May weakly gangs were to be put on the village relief list, given a month's dole and sent to their homes. Early in June it was to be proclaimed that Government wished the people to return to their homes, and would undertake the support of their dependants if they left the works. It was decided to close village works and all, except a few, public works, and the principle was laid down that "village relief will be the backbone of the relief system in the rains." Every one out of work was to be given gratuitous relief, and in severely distressed tracts a certain number of people actually engaged by private employers of labour were to receive a wage or a portion of a wage from the State. The reason for this last concession was not that wages were scant, but the fear that they might become scant, owing to a short demand for labour; the object was to supplement, not to supplant, private employment.

146. There was some delay in carrying out the programme, but by the middle of June the people seem to have been collected at their homes. The rains held off; a panic ensued; the kitchens were rushed; and new kitchens were opened, with results that are now generally admitted to have been deplorable.

147. These results are directly attributable to the premature action of the administration, and to the conversion of a safeguard into the object of a policy; they also incidentally afford a most striking justification of the principle that an administration, while ready for action on

all points, should wait on events before acting. Had village works been kept open until the monsoon had declared itself, and had the hand of the Administration as regards general gratuitous relief been stayed, these results would probably never have occurred. As things turned out, the numbers on relief in the Central Provinces at the midrains period were, contrary to all previous experience, not only relatively higher than at any other period of the famine, but absolutely enormous.

148. In the adjacent province of Berar a different policy was followed. Village works were not opened—there is said to be little scope for them in Berar—and the Administration waited till the rains fell. The order came, indeed, to introduce the rains policy adopted in the Central Provinces, but the Commissioner contested its wisdom and was allowed to disregard it. When the rains fell, the wages were reduced and a few village works were opened. But the people were reluctant to work in the fields—a testimony to the easy times they had enjoyed on the relief works—and, in order to induce them to return to agricultural labour, more pressure by a further reduction of the wage was necessary. At the same time there was, in accordance with right principle, an extension of gratuitous relief, both by kitchens and by doles. We consider that the causes and the consequences of this action in Berar support the policy which we have advocated.

149. The policy in Bombay was laid down on the 30th April. From the beginning of June people were, so far as possible, to be employed on works near their homes, residence on relief works being no longer compulsory, but hutting being provided for those who remained. If these were professional labourers, pure payment by results with a maximum strictly limited to a subsistence wage was to be introduced. Works were to be gradually closed, the remaining workers being drafted to other works. Village inspection with reference to the necessity for gratuitous relief was to be more vigilant than ever; dependants of cultivators might get the dole “unless they are within easy reach of a kitchen and can be induced to go to it.” Cultivators in need of help were to get it by subsistence advances or otherwise.

150. Subsequently in Gujarat a different policy was promulgated by the Commissioner and generally approved by the Government. Its leading features were—

(I) *Before the rains fell heavily*—Works and specially small works were to be kept open; doles were to be given to all who were too weak to work, and to destitute cultivators; and poor-houses were to be started and eventually turned into kitchens, though not on the extensive scale of the Central Provinces.

(II) *After the rains fell heavily*—A monthly allowance from the Charitable Relief Fund was to be given to *bonâ fide* cultivators of the poorest class; and *taqâvî* for subsistence to the less poor cultivators. Meanwhile such works as could were to be kept open, and dole and kitchen relief were to be given to those not helped in other ways. Kitchen lists were, however, to be scrutinized in the same way as dole lists. It was impressed on all responsible for village

inspection that every one, except those who had means of their own, was to be included in one or other of the above classes. Dependants of those receiving grants from the Charitable Relief Fund or of *taqávi* were to be helped by the dole or from a kitchen. Those who for social reasons were reluctant to go on works, or take the dole, were to be given a cash dole or a nominal loan. Strenuous efforts to stimulate cultivation by manual labour were also to be made.

151. From this it will appear that the policy originally laid down was substantially that which we advocate; but, owing to the course of events, which we notice elsewhere, and to the postponement of the rains, the Bombay Government were unfortunately compelled to depart from their original intentions, and to adopt a policy which led to a continuance of relief works and to a very large increase of gratuitous relief throughout the Presidency. This extension of charity came unhappily too late in some districts, and was attended by great mortality.

152. In Ajmer and the Punjab the Administration assumed that ordinary agricultural conditions would supervene on the coming of the rains: in the Punjab, it should be noted, a programme of village works was ready in case it should be required. The people did not begin to leave the works in large numbers until the rains were well established; and the works were then gradually closed. Simultaneously with the closing of the works there was, in the Punjab, as there always should be in the rains of a famine year, an increase in the distribution of gratuitous relief.

153. We conclude from these results that the proper policy for the rains is to assume that events will be normal, after the rains have fallen. When the monsoon has declared itself, the tasks may legitimately be raised, in order to induce the people to return to their homes. Dependants who have returned from the works to their homes should be given gratuitous relief there. But the distribution of gratuitous relief in the rains to the able-bodied should never be repeated. If the people cling to the works, after a demand for field labour has set in, it is legitimate further to raise the task and to use pressure to get them back to their villages. A few works should always be kept open, to meet any unexpected contraction in the labour market caused by, say, a temporary cessation of the rains, or the substitution on a large scale of a crop requiring less for a crop requiring more labour. But the attempt to supplement the wages of private employers—a marked example of the extravagance to which a misuse of the gratuitous relief policy may run—should never be tried again. The attempt failed, though not before it had produced a disturbing effect upon the private labour market—the inevitable result of a mistaken rains policy, of which there have been many complaints, particularly in the Central Provinces, but also largely elsewhere. It is no doubt true that in a year of famine the labourer receives a wage below the normal wage; but this deficiency is more than made good to him if he is relieved by the State of the support of some of his dependants. Nor should it be forgotten to what extent suspensions of revenue, liberal *taqávi* advances and grants from the Charitable Relief Fund set free the capital of the country for agricultural effort.

154. Although it does not come within the scope of our enquiry we cannot help referring in this place to the great benefits which have been conferred by the distribution of these grants from the Charitable Relief Fund. It is not necessary for us to repeat the gratitude which this noble charity has excited in all parts of India; it is enough to say that it has saved from dissolution many Indian homes, and that it has given needed help to those whose self-respect forbade them to accept the charity of the State.

SECTION XV.—*Closure of Relief.*

155. When once favourable rains are established and the earliest crops have germinated, it is time to set about arrangements for the final closure of relief. There is danger, no doubt, in discontinuing support too suddenly and too soon, and no action should be taken without a careful review of all the facts bearing upon the existing state of the country and the condition of the people. But there is also danger in continuing State relief after the necessity for it has ceased, and thereby retarding the return of the community to its ordinary ways of life. This latter danger is, in our opinion, so grave that, in order to avoid it, we should be prepared to recommend the running of some risk. The risk, however, will be inconsiderable if the turning point is fixed at the ripening of the earliest of the principal autumn crops.

156. By that time, indeed, the last of the works should have been closed, the process of closure having been begun as soon as the demand for employment in the fields sets in. Gratuitous relief will, of necessity, be continued a little longer; but, as agricultural employment increases, the gratuitous relief lists should be carefully scrutinized, with a view to their reduction. And, when the earliest autumn crop is ripe in any tract, gratuitous relief should be generally closed in it; at this stage whole villages should be struck off the list at a time; but all the recipients of this out-door relief should, on its discontinuance, be given a valedictory dole. It will probably be necessary to keep poor-houses open until the autumn harvest generally has been gathered, and until private charity renews its usual activity: individuals should, however, be returned to their villages when the earliest crops are ripe, receiving, on departure, a valedictory dole. Such doles should be generally distributed when the poor-houses are being finally closed.

157. This procedure was generally followed, with success, in the recent famine, but there was delay in many localities, due in some cases to insufficient rains or a persistently heavy mortality, in other cases to less valid reasons. In the most distressed districts of Bombay conditions of acute scarcity still prevail, and in consequence the relief system is still in operation. Generally, however, if the rains are favourable, the middle of October should witness the end of relief operations.

SECTION XVI.—*Aboriginal Tribes.*

158. The experience gained in the recent famine in the treatment of aboriginal and forest tribes confirms the recommendations made on this subject by the Famine Commission of 1898. The essence of those recommendations was that relief must be taken to aboriginal people if they are reluctant to come to it; that gratuitous relief should be liberal;

and that personal management should take the place of the automatic methods which govern the administration of relief under ordinary conditions. The difficulties vary in proportion to the shyness of the people; and the great thing is to overcome that shyness.

159. A successful episode of the famine was the administration of relief to the aborigines of the Melghat *taluk* in Berar. These people were, to begin with, employed as far as possible in their usual avocations of cutting timber and collecting jungle produce for the market. When this work ran out or became unremunerative, they were employed near their villages either in preparing their fields for the summer sowings or in other ways. When the rains broke, they were set to sow their fields, seed being found for them. They were paid for this work, while the weak and helpless were gratuitously relieved. In this way the months of trial were tided over. Judged by the ultimate test of lives saved, these interesting operations, though somewhat costly, were successful, and they emphasize the importance of providing suitable work for these tribes, and of employing in the relief of them officials whom they can trust.

160. In the Central Provinces last year the difficulties of dealing with forest tribes were far less than in 1897. Experience in that famine had prepared the tribes to look to the Government, and had taught the officers of Government how to deal with the tribes. It was even found in some districts that the tribes made no objection to come on the ordinary relief works, and that it was not necessary to make special arrangements for them.

161. The difficulties in dealing with these people were in this famine greatest in Bombay; and in Gujarat the advantages of previous experience were wanting on both sides. As early as August 1899, indeed, the Bombay Government issued the necessary instructions; but the local authorities failed in Khandesh to realize their responsibilities until it was too late; while the fear, which oppressed the local officers, that the people would become demoralized, and the reliance placed on the power of the tribes to support themselves on forest products and on meat, were the cause in the Panch Mahals of disastrous delay in applying acceptable forms of relief. In both Khandesh and the Panch Mahals the mortality among these tribes was very heavy; but it must be said that difficulties, in the Panch Mahals especially, were exceptionally great, owing to the character of the people, to their dispersion in detached homesteads, to the fewness of the village officials, and to the unwillingness of outsiders to take temporary service in the district. Moreover, the grain shops were few, and grain dealers, in fear of spoliation, fled soon to the towns.

But, after making every allowance for these difficulties, we are forced to the conclusion that the main causes of failure were mistakes of principle. They were the omission to give gratuitous village relief sufficiently early; the paucity and unsuitability of works; the maintenance up to a late date of the piece-work system, which is unsuitable to these tribes; and, lastly, great irregularity in the payment of the workers, owing to short establishments. The stringency of the relief system was relaxed on all points in the hot weather, and relief was latterly as liberal as it was restricted at the outset; but the mistake had been made, and, as

we have more than once observed, it is not possible in famine times to recover lost ground.

162. We recommend the incorporation in the Famine Codes of all provinces, in which aboriginal tribes are found, of the suggestions made in this connection by the Famine Commission of 1898. The experience of the recent famine lays special emphasis on the necessity for the following measures and methods of relief :—

- (a) provision of complete programmes of suitable works before the famine begins;
- (b) appointment of officers specially qualified to deal with the tribes, wherever these are numerous;
- (c) numerous works near the homes of the people; and, as far as possible, congenial work, such as grass-cutting and storage; wood-cutting and cutting of fire-lines; mat making; village and forest roads; village tanks; clearing fields of stones and stumps; manual cultivation of the fields;
- (d) daily payments in all cases;
- (e) constant village inspection, and liberal gratuitous relief for all unable to work.

SECTION XVII.—*Immigration from Native States.*

163. The question of immigration is conspicuous in our instructions, and has repeatedly been forced into prominence in the course of our enquiries. Those enquiries, however, are restricted to British India, and, although we are far from questioning the wisdom of this limitation, we are sensible of the disadvantage of hearing one side only of the question. Such investigations as we have been able to make, and the various communications which we have received, have enabled us to realize the extreme difficulty and delicacy of enquiries of this kind. On the British side it is alleged that immigration at the outset was occasioned by delay on the part of the Darbars in instituting relief, and by the inadequacy of the relief when instituted; on the side of some of the Native States it is contended that the terms of relief in British territory were so very liberal as to attract out of the Native States people for whom relief was ready at home, and even people who were in no need of relief at all. In the case of the immigration from the Baroda State to the Broach district of Gujarat, in regard to which we have heard both sides of the question, we are able to arrive at something like a judicial pronouncement. Our opinion is that, while, on the one hand, conditions on the Broach works were for a time so lax as to attract people from beyond the British border, on the other hand the relief measures adopted in the Baroda State were so inadequate as to force Baroda subjects to resort in large numbers to British territory for relief. In Mewar, again, at the commencement, relief was so inadequate, while the terms of relief in Ajmer were so liberal, that by December 1899 some 25,000 Mewar subjects were on relief in Ajmer. Later on, it should be added, the relief in Mewar was liberal.

164. Notwithstanding these significant examples, we hesitate to make any broad and general assertions as to the cause of this immigration into British districts, partly because in other cases we have not

heard both sides, and partly also because we are struck with the advance made in this famine by most of the Darbars towards bringing their relief into line with the humane policy of the British Government. It must also be remembered that in certain States the failure of the water-supply left no alternative but emigration. No instance has come to our notice of a refusal on the part of a Darbar to take back and provide relief for refugees who were identified as such in British territory, although in some cases there was delay in doing so. We have even heard of cases in Rajputana where the Darbars gave relief to the subjects of their feudatory nobles, which those nobles refused or were unable to give.

165. But, although we are not in a position to analyze the causes of immigration or to measure its extent, we have no doubt whatever that, during the famine, refugees from Native States invaded the border districts of British territory at a very early date and in unusually large numbers. Nor have we any doubt that the refugees arrived generally in bad condition; that they embarrassed the administration; and that they largely swelled the mortality in British districts. In the Punjab alone difficulties of this kind were comparatively few, although even there loud complaints of immigration from Bikaner were made at the outset; while the signal failure of the Darbar in Patiala to realize their responsibilities necessitated intervention by the Punjab Government. In the Central Provinces immigration into Sambalpur, which lies in the midst of petty principalities, was for a time extensive; so was immigration into the northern districts of Saugor, Hoshangabad and Nimar, which march with Bhopal and the other States of the Central India Agency; and into the southern districts of Chanda and Wardha, which abut on the territories of His Highness the Nizam. In Berar large numbers of immigrants from Hyderabad were found in the border districts of Wun, Basim and Buldana. In the Bombay Deccan, again, large numbers of refugees from Hyderabad repaired to the districts of the eastern border, especially Khandesh and Sholapur. In Gujarat, British districts lie interlaced with numerous Native States, and were invaded from every side and particularly from Baroda. Lastly, Ajmer was literally over-run; it is geographically an island of British territory in a wide sea of Native States of the Rajputana Agency, traversed by the great and immemorial highways of the country.

166. The methods adopted in the different provinces to deal with immigration were generally similar: representations were made to the Darbars concerned to open or extend relief; and such refugees as could be identified were conducted back to relief in their own territories. But identification on a large scale is practically impossible; there are no means of distinguishing by appearance people of the same race, religion, language and habits, living on opposite sides of a geographical line, and the fear of deportation leads to a general falsification of domicile. Indeed, the effect of experience in this connection during the recent famine is rather to illustrate what is impracticable than to point out the way to successful management in the future.

167. We can most conveniently indicate our views by dealing with the various suggestions that have been made. It has not been suggested, in any responsible quarter, that relief should be refused to these unfortunate refugees; the attempt would be alike inhuman and impracticable.

The States from which in times of famine and distress people flow into British territory are for the most part areas which sustain a population not so prosperous as that in British India. In many cases emigration under such circumstances is an immemorial custom, and, in the case of a water famine, it is the only means by which the emigrants can escape from certain death, while, independently of the impossibility of discriminating between British subjects and foreigners along an open border, the Government would be confronted with the impossible task of forcing back an advancing tide. For these reasons we consider it out of the question to depart from the principle laid down by the Famine Commissions of 1880 and 1898 that all comers, whether British subjects or residents of Native States, should be relieved without distinction.

168. Other proposals have, however, been made :—

- (1) It has been suggested that the administration of relief in Native States should be taken out of the sphere of the Foreign Department. It is enough to say that we regard this proposal, apart from all considerations of political expediency, as uncalled for and impracticable.
- (2) It has also been suggested that Native States should give relief on the scale adopted in British districts, and upon the same conditions. The inconvenience of a double scale of relief is as great as it is obvious; but, apart from considerations of the political expediency or justice of forcing on Native States a scale of relief in the fixing of which they have had no voice, and which they regard as excessive, we consider the proposal impracticable, because we are given to understand that many Native States could not possibly afford to adopt it. We may add that we have been impressed by the amount of the expenditure which has been incurred in many States even under present conditions.
- (3) It was suggested by the Famine Commission of 1898 that officers should be posted to guide and control the stream of emigrants, advising them where they would find relief in their own States or in British territory. This would not, however, dispose of the problem, and we find it somewhat difficult to believe that the emigrants would require such information or would act upon it.
- (4) A further suggestion of the same nature, that emigrants should be directed to selected places in British territory, is open to grave objections. In the first place such directions might tend to stimulate immigration; and in any case the successful conduct of such an operation implies more perfect information and a more complete organization than exist in times of famine as well as compliance on the part of the immigrants. In practice it would be left, in many cases, to subordinates, who could not be trusted by the Government, and would not be trusted by the people. Failure would only lead to increased confusion, and wrong directions to increased distress, the responsibility for which would rest upon the British Government.

- (5) Finally, it has been suggested that immigrants should be received without demur, but that at the end of the famine the cost of their maintenance should be debited to the Native States concerned. We consider this suggestion altogether impracticable. It would lead to numberless embarrassments; identification would be easily avoided; the temptation to fraud on the part of subordinates would be great; and there would be no limit to the confusion and friction which would arise.

169. We have come, then, as the result of an enquiry, necessarily incomplete, to the general conclusion that immigration was undoubtedly very extensive, that it hampered the British administration, and that it greatly affected the mortality. Nevertheless the information at our disposal regarding the famine administration of the Native States does not justify us in recommending any radical change of policy. We strongly recommend that the following ends should be carefully kept in view and enforced by British officers of frontier districts, namely, (a) the identification of immigrants, (b) their collection into gangs or bodies, and (c) the transfer of these bodies to the care of the States to which they belong.

170. We recommend that in Native States, as in British territory, complete programmes of relief works should be regularly maintained with a view to discouraging emigration by providing relief in the State as soon as it is required. Something might be done in the way of assisting the migration of cattle by publishing information regarding feeding grounds available in British India; but we are bound to say that experience does not much encourage the hope that the owners of cattle will be ready to take advice. Lastly, it may be useful and prevent delay if District Officers in times of famine correspond direct with the Political Agents. This, we understand, is often, but not invariably, done.

SECTION XVIII.—*Medical and Sanitary.*

171. In other branches of the administration the intelligence of the subordinates may compensate for their want of professional knowledge; but in the Medical Department professional knowledge is indispensable in every rank. The difficulty of collecting sufficient trained establishment was one of the greatest difficulties of the recent famine. The medical arrangements in ordinary times vary little in the different provinces, and in none do they lend themselves readily to expansion, the staff being barely sufficient to meet the constantly increasing demands of the people upon it. In every district there is a District Medical and Sanitary Officer, and in every province except Bombay he is responsible for all medical and sanitary arrangements in the district in times of famine. In Bombay the functions of this officer in times of famine are restricted to the medical and sanitary charge of the headquarters station of the district, and to the supply to all parts of the district of medical stores and appliances; while, for the supervision of medical and sanitary work outside the headquarters station, Special Medical Officers are appointed in direct subordination to the Sanitary Commissioner. Under the District Medical and Sanitary Officer in ordinary times profes-

sionally trained men of the rank of Civil Assistant Surgeons and Hospital Assistants are placed, in all provinces, in charge of outlying dispensaries. These officials are the backbone of the medical staff in times of famine. The officials of the Vaccination Department are also available for sanitary duties, but they possess no medical knowledge, and their education and social status are generally indifferent. Their services can, however, be utilized with advantage in such duties as the reporting of disease and the distribution of medicines.

172. In view of the difficulties experienced in getting the staff, it is very important that on the first appearance of distress the Chief Medical Officer of the province should be informed of the demands for extra staff that are likely to be made upon him; and that he should at once make active efforts to collect it. The estimate should provide at least one hospital assistant for every charge upon a large departmental work; if possible, one for every group of small departmental and non-departmental works; and one for every poor-house. Events in all provinces, especially in Bombay, showed the unfortunate results occasioned by delay in the appointment of these hospital assistants. It is essential that such appointments should be made directly test works are converted into regular relief works, or, in the case of poor-houses, directly the poor-house is opened. It is scarcely necessary to remark that these hospital assistants must know the language of the tract to which they are posted; this is a real difficulty in certain parts of India, and was acutely felt in Gujarat during the recent famine.

173. The duties of a hospital assistant on a relief work should comprise, in addition to attendance on the sick in hospital,—

- (1) daily inspection of the sanitary arrangements and the water-supply;
- (2) periodical inspection of the food offered for sale, and the prohibition of the sale of injurious grain;
- (3) periodical inspection of all persons on the works with special attention to new-comers, weakly gangs and nursing mothers;
- (4) detection of the first cases of infectious and contagious disease, and the adoption of measures to prevent their spreading;
- (5) distribution of quinine on the works to prevent malarial fever and the supply of anti-scorbutics on the appearance of scurvy.

And he should bring at once to the notice of the officer in charge any cases in which he thinks that lighter tasking or gratuitous relief is required, or in which, on account of extreme emaciation, special diet is necessary.

174. It is part of our plan of control to place all officials on the works in subordination to the District Engineer. The hospital assistant should not, we think, be an exception to this rule. The District Engineer should have complete disciplinary authority over him, including the power to order his transfer from one work to another. He should, however, report any transfer at once for the information of the District Medical and Sanitary Officer, to whom he should forward in original, without delay, all reports of a professional character which he may receive affecting the public health.

175. But the more the hospital assistant is subordinated to the Public Works Department, the greater will be the need of professional

supervision in professional matters. This can only be secured by active inspection on the part of peripatetic medical officers of a superior grade. The District Medical and Sanitary Officer should himself make flying visits of inspection to the different works from time to time, but his duties will keep him, as a rule, at headquarters, and he will only be able to exercise a general control. We consider that it is absolutely necessary that he should have a strong subordinate staff, to inspect and report to him.

176. The District Medical and Sanitary Officer himself should, like all other officers engaged in famine relief in the district, be subordinate to the Collector. The Collector should, however, consult him in all matters connected with the public health. In the event of any difference of opinion between them, the point should be referred to the Sanitary Commissioner, whose orders, pending reference to higher authority, should be carried out.

177. We consider that the authority of the Sanitary Department in all matters affecting the public health was duly recognized in the recent famine, and that the want of success, which was noticeable in most provinces, but particularly in Bombay, was entirely due to deficiency in the numbers and the quality of medical subordinates. To meet such deficiency we suggest for the future the maintenance in ordinary times by the Chief Medical Officer of the province of a list of qualified candidates for employment; the offer of higher salaries; and the insistence on punctuality in their payment. Upon this last point very strong representations have been made in both the Central Provinces and Bombay. It appears that in some cases hospital assistants were not paid for months, whereby they were put to great hardship. We consider that the present system of paying them is, in this respect, in urgent need of reform; and the reform might be part of the general simplification of accounts, which we have already recommended.

178. Again, if the staff cannot be increased, something may be done in the way of reducing the work. When, for instance, there is much sickness in the camp, the hospital assistant may legitimately be relieved of sanitary duties beyond a general supervision, a competent conservancy *darogha*, or official of that stamp, being appointed to assist him. In an emergency the employment under proper supervision of *hakims* and *baidis* has been found to be useful, but their methods are not of a character to invite a large reliance on them, and the better practitioners among them are frequently reluctant to subject themselves to strange control. But they can be usefully employed to attend the sick at night—a time when much attention is required, and but little, we fear, is received from the overworked general staff. And we also think it very probable that, where native practitioners can be employed, they will be found more acceptable to the people than superannuated pensioned medical subordinates or the young men to whom in its straits the Administration is forced to look, and whose professional attainments are often limited by the notions they have picked up in menial occupations in druggists' shops.

179. We consider that, so far as the superior staff was concerned, very great attention was paid in all provinces to the water and food

supply for the works. There is evidence that in many cases the Sanitary Officers showed great resourcefulness and practical skill; and that, when cholera was raging in the country round, the works were, through their exertions, comparatively free from disease. But the famine was a famine of water as well as of food; and the best arrangements could not prevent the people from resorting to pools of bad water by night. We desire specially to emphasize the necessity of taking possession of all wells and other sources of water-supply within a wide radius of a large public work, of guarding them and of regularly disinfecting them with permanganate of potash, before the arrival of workers on the spot. It is desirable to send, in all cases, an advance party to ascertain that the locality to which the workers are proceeding is free from disease. In cases in which a move to an infected locality is unavoidable, it may be noted that the water in irrigation wells in the fields is likely to be purer than that of the wells in the villages themselves. Experience shows that it is always preferable, where possible, to have the water drawn and supplied to the people by men of suitable castes, rather than to allow the people to draw the water themselves. In the case of village works, it is equally important to improve and conserve the village water-supply. In fact this should never, in any circumstances, be neglected.

SECTION XIX.—*Mortality.*

180. Before we consider, as required by our instructions, "in what manner the famine affected the death-rate of the various provinces and districts" and enquire into "the causes of any variation," it is necessary to explain our opinion of the connection with famine of the different diseases which commonly appear in its course, viz., fever, cholera, dysentery and diarrhoea, and small-pox. The last is inconsiderable, and only so far connected with famine as vaccination falls into disuse, owing to the engagement of the vaccinating staff on other duties. Dysentery and diarrhoea are peculiarly famine diseases, directly caused by insufficient and unwholesome food or by reduced powers of digestion and assimilation as the result of continued privation. Again, it is practically impossible to prevent the outbreak of cholera when large masses of men are collected together in the hot weather under famine conditions; but efficient organization and careful sanitary arrangements can stay the spread of the epidemic, and when these precautions are not taken, a considerable share, at any rate, of the resultant mortality must be deemed to have been preventible. Of fevers it can only be said that they often are in origin climatic, but that their fatality is, owing to the reduced power of the people to resist them, largely due to famine.

181. Conclusions based on a minute analysis of the returns would be deceptive, because the data rest on the erratic diagnosis of the village watchman, who is in the habit of attributing to fever all deaths, as to the cause of which he is in doubt. Moreover, it is certain that an immense number of deaths due to cholera in 1900 were erroneously assigned in the reports to some other cause.

182. We are not prepared to adopt a fatalistic view of famine mortality; for such a view is directly controverted by the low death-rates which efficient administration secured in more than one province affected by severe famine in 1897. But generally we take no exception to the statement of the Famine Commission of 1880, that "no imaginable

system of relief will completely meet all the various degrees of privation and suffering which a famine produces." And, in dealing with the death-rates of the recent famine, special allowance must be made for three great facts: first, the extreme and unusual rigour of the winter of 1899-1900 in some provinces; secondly, the shortness of the water-supply, which led to its pollution; and, thirdly, the virulent epidemic of malarial fever in the autumn of 1900, which affected the rich as well as the poor.

183. The following are the monthly death-rates* recorded for the Central Provinces:—

Month.	DEATH-RATES PER MILLE FROM—					Average death-rate per mille from all causes for the ten years ending 1896.
	Small-pox.	Fever.	Dysentery and Diarrhœa.	Cholera.	All causes.	
September 1899	<i>Nil.</i>	1·26	·18	<i>Nil.</i>	2·25	3·47
October „	<i>Nil.</i>	1·23	·11	<i>Nil.</i>	2·17	3·54
November „	<i>Nil.</i>	1·11	·10	<i>Nil.</i>	2·02	3·09
December „	·02	1·18	·10	·01	2·22	2·83
January 1900	·04	1·32	·14	·02	2·54	2·23
February „	·05	1·27	·16	<i>Nil.</i>	2·45	2·11
March „	·10	1·51	·21	·13	3·02	2·47
April „	·11	1·80	·27	·77	4·09	2·86
May „	·10	1·87	·28	1·24	4·76	3·07
June „	·09	2·58	·42	2·12	6·69	2·80
July „	·06	2·97	·72	1·39	6·78	2·67
August „	·04	3·63	·93	·83	7·49	3·36
September „	·04	3·74	·93	·13	6·63	3·47
October „	·04	3·69	·58	·01	5·68	3·54
November „	·03	2·48	·34	<i>Nil.</i>	3·78	3·09
December „	·04	1·80	·20	<i>Nil.</i>	2·77	2·83

* The death-rates supplied to us have been calculated, in all provinces, on the census population of 1891.

The rates have not been carried beyond the second decimal.

Thus the death-rate for the whole province was below average till the end of December 1899, and was high during the six months from May to November, cholera having raged during the first three months of that period, and fever having been very severe during the last three months of it. For the period of the famine, from November 1899 to October 1900, the death-rate for the province was 54·37 per mille as against a decennial average for the same period of 34·50. With the same decennial average the death-rate per mille for the year 1900 was 56·68.

184. The districts in which the death-rates in 1900 were highest are Nimar (105), Sambalpur (103·87), Chanda (91·87), Wardha (85·05), Chhindwara (83·61) and Betul (81·42). Nimar suffered severely from a water famine, and much of the sickness which prevailed was undoubtedly due to this cause. But its death-rates, which reached 4·98 per mille so early as December 1899, and rose to 16·42 in August 1900, are misleading: new areas had been populated since the census of 1891; the district was invaded by immigrants, in large numbers, during 1900; and finally, the recent census figures show that, far from falling off the population of the district has increased since 1891 by 14·37 per cent. It is therefore impossible to doubt that the death-rates reported in Nimar have been calculated on figures much below those of the actual population, both resident and immigrant, in 1900. In Sambalpur similar conditions prevailed to some extent. There is reason to believe that, owing to immigration, both permanent and temporary, the real population of the district in 1900 was far larger than that which was assumed for calculating the death-rates in that year. Moreover, the recent census figures show that, in spite of the high death-rates reported, the population has increased by 4·19 per cent. since 1891. Clearly, therefore, the death-rates recorded greatly exaggerate the actual mortality, though they do not altogether deprive it of its famine character. In the other districts it is not suggested that immigration materially affected the death-rates. Some officers are of opinion that the wholesale distribution of ill-cooked food at the kitchens, combined with the exposure involved in going to and from them, contributed to swell the death-roll. In his evidence before us the Administrative Medical Officer appeared to attach some weight to the latter cause.

185. In reviewing the administration of the famine of the Central Provinces in 1900 the Chief Commissioner has instituted a comparison between the mortality of 1900 and that of 1889, which was a very unhealthy year, but without any famine conditions. He points out that the difference between the mortality of these two years, which were alike in all respects except in the presence of famine during 1900, has been not more than 10 per mille or 1 per cent., after allowing for non-reported deaths from cholera and small-pox. From this comparison he suggests the conclusion that, with 20 per cent. of the population relieved, the small excess of 1 per cent. on the mortality of 1889 is a matter for congratulation. These arguments are not without weight, but they do not controvert the fact that the death-rate of the province generally rose during 1900 to 64 per cent. above the average death-rate.

186. In Berar the following monthly death-rates were recorded :—

Month.	DEATH-RATES PER MILLE FROM—					Average death-rate per mille from all causes for the ten years ending 1896.
	Small pox.	Fever.	Dysentery and Diarrhoea.	Cholera.	All causes.	
September 1899 . . .	<i>Nil</i>	1·2	·8	·03	3·1	4·8
October „ . . .	<i>Nil</i>	1·3	·7	·1	3·3	4·1
November „ . . .	<i>Nil</i>	1·4	·7	·04	3·3	3·2
December „ . . .	·01	1·6	·8	·01	3·8	2·8
January 1900 . . .	·03	1·8	1·0	·09	4·4	2·5
February „ . . .	·04	1·7	1·0	·2	4·6	2·3
March „ . . .	·05	2·0	1·3	·1	5·1	3·0
April „ . . .	·06	2·0	1·2	4	5·5	3·4
May „ . . .	·05	2·4	1·5	1·0	7·0	3·0
June „ . . .	·03	2·5	1·8	1·4	7·9	2·1
July „ . . .	·02	3·2	3·3	2·2	11·6	2·9
August „ . . .	<i>Nil</i>	3·7	4·0	·9	11·9	4·7
September „ . . .	<i>Nil</i>	3·5	3·4	0·4	9·7	4·8
October „ . . .	<i>Nil</i>	3·2	2·1	<i>Nil</i>	7·3	4·1
November „ . . .	<i>Nil</i>	2·1	1·1	<i>Nil</i>	4·4	3·2
December „ . . .	<i>Nil</i>	1·4	·7	<i>Nil</i>	3·0	2·8

For the period of the famine from November 1899 to October 1900, the death-rate for the whole province was 82·1 per mille, as against a decennial average for the same period of 38·8; for the year 1900 it was 82·4 per mille, against a decennial average of 38·8, or a little more than double the average. The death-rate for the year rose in Basim as high as 110·8 per mille, or just three times the average, and in Buldana to 95·4, nearly two and a half times the average rate. It is said that fever of a virulent type prevailed in the rains and affected both rich and poor. A considerable share of the mortality is attributed by the local officers to the presence of immigrants; but here, as elsewhere, it has been found impossible to obtain any definite information as to the volume of this invasion, and it is to be observed that, whereas the immigrants are said to have been most numerous in the earlier months of 1900, when it is stated that sufficient provision for relief had not been made in Native territory, the death-rates did not rise materially till May, by which time many of the refugees had been conducted across the border. On the whole, we are compelled to say that much of the excess mortality cannot be disconnected from privation.

187. We give below the monthly death-rates for the affected districts of the Bombay Presidency :—

Month.	DEATH-RATES PER MILLE FROM—					Average death-rate per mille from all causes for the ten years ending 1896.
	Small-pox.	Fever.	Dysentery and Diarrhoea.	Cholera.	All causes.	
September 1899	<i>Nil</i>	·84	·48	·01	2·47	2·78
October „	<i>Nil</i>	·96	·46	·02	2·64	2·61
November „	<i>Nil</i>	1·03	·41	<i>Nil</i>	2·75	2·58
December „	·01	1·35	·47	<i>Nil</i>	3·34	2·48
January 1900	·03	1·90	·69	·03	4·35	2·30
February „	·06	1·84	·85	·04	4·41	2·00
March „	·07	2·11	1·35	·44	6·27	2·31
April „	·07	2·71	1·57	1·23	7·64	2·50
May „	·04	3·77	1·83	2·65	10·51	2·55
June „	·02	3·14	1·47	2·49	8·91	2·42
July „	·01	3·31	2·18	2·61	10·63	2·05
August „	<i>Nil</i>	4·08	2·27	1·08	9·73	3·15
September „	<i>Nil</i>	3·37	1·64	·18	7·05	2·78
October „	<i>Nil</i>	3·29	·94	·03	5·73	2·61
November „	·01	2·91	·54	02	4·62	2·53
December „	·01	2·33	·39	·01	3·70	2·43

For the period from November 1899 to October 1900 the death-rate for the affected districts was 81·32 per mille, against a decennial average for the same period of 29·72; with the same decennial average the death-rate per mille for the year 1900 was 83·55. Different parts of the Presidency were, however, affected in very varying degrees. Excluding the isolated and desert district of Thar and Parkar, the figures for which appear to be altogether unreliable, the districts of the Presidency, affected by famine, fall naturally into three groups, *viz.*,—

the four districts of the Southern Division—Satara, Sholapur, Belgaum and Bijapur;

the four districts of the Central Division—Khandesh, Nasik, Poona and Ahmednagar, with the addition of Thana, which geographically belongs to them; and

the five districts of Gujarat—the Panch Maháls, Ahmedabad, Kaira, Broach and Surat.

188. In the Southern Division there was little distress and the death-rates were relatively not high :—

District.	Death-rate per mille for the year 1900.	Average death-rate per mille for the ten years ending 1896.
Satara	41·15	29·95
Sholapur	53·43	30·96
Belgaum	39·03	27·61
Bijapur	31·67	26·20

Apart from a large mortality from bowel complaints and a fever death-rate generally below average, the figures for this group afford no special ground for comment. The death-rate in Sholapur was, undoubtedly, swollen by immigration.

189. In the Central Division and Thana the death-rates were more than double the average in every district, except Poona.

The following figures analyze the death-rates per mille in the four most affected districts :—

District.	SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		CHOLERA.		ALL CAUSES.	
	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.
Thana	1·27	·27	26·86	18·99	4·73	1·26	2·54	1·46	69·25	25·91
Ahmednagar . .	·13	·09	16·90	22·39	27·26	2·72	6·93	2·07	66·04	33·24
Khandesh . . .	·95	·50	40·46	24·50	26·06	3·76	13·84	1·42	96·23	31·92
Nasik	·21	·35	25·83	21·53	15·19	3·89	11·43	1·50	74·76	34·72

190. The Thana district was not affected by famine, but was overrun by beggars in wretched condition, who were attracted to Bombay : moreover, the plague death-rate in this district was 2·37 in the year 1900. In Ahmednagar and Khandesh the death-rates were no doubt, to some extent, swollen by immigration. But, generally, the characteristics of the mortality in this group are the absence in most places of specially high fever death-rates and the extreme severity everywhere of either cholera, or bowel complaints, or both. These high death-rates from dysentery and diarrhœa indicate the effects of privation.

191. The death-rates in Gujarat were the highest recorded in the recent famine :—

District.	SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		CHOLERA.		ALL CAUSES.	
	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.
Ahmedabad . .	·10	·06	111·27	29·88	14·59	7·8	13·52	·33	173·10	35·69
Broach	Nil	·14	89·30	32·94	15·86	·43	15·91	1·78	161·96	39·56
Kaira	·03	·05	47·92	27·74	23·53	·51	14·29	·59	145·40	31·21
Panch Mahāls .	·47	·12	167·77	21·82	64·16	·12	18·41	·61	281·02	22·68
Surat	·09	·17	39·90	25·22	4·47	1·29	10·50	2·03	79·42	32·50

192. The figures for Surat indicate the presence of distress and the occurrence of much mortality, but are, from the famine point of view, of small significance compared with those of the other four districts, in which the mortality from fever, bowel complaints and cholera was excessive. Cholera raged in May, and did not finally abate till August. It is stated by all the witnesses that much of the mortality due to cholera

was wrongly assigned to other diseases, and it is evident from the figures, given below, that to a large extent this was so. The sudden and enormous rise in the death-rates attributed to fever and bowel complaints in May is as remarkable as their fall after August, when the fever mortality would ordinarily be expected to rise, and the inference is irresistible that the abnormal rates under these two heads during the cholera months, May, June and July, were in reality inflated by cholera deaths. The monthly death-rates will show what we mean :—

Month.	AHMEDABAD.			BROACH.			KAIRA.			PANCH MAHALS.		
	Cholera.	Fever.	Dysentery and Diarrhoea.	Cholera.	Fever.	Dysentery and Diarrhoea.	Cholera.	Fever.	Dysentery and Diarrhoea.	Cholera.	Fever.	Dysentery and Diarrhoea.
March 1900 . . .	Nil.	5.43	.70	Nil.	7.58	2.32	Nil.	3.56	3.25	Nil.	12.54	4.08
April „ . . .	.04	6.35	1.10	.01	6.76	1.80	1.28	3.69	4.05	.62	13.32	6.45
May „ . . .	8.01	13.29	2.68	11.49	11.94	3.12	7.07	4.74	2.36	10.58	25.21	13.75
June „ . . .	2.51	9.73	1.74	1.39	6.88	.97	1.91	3.41	1.36	2.29	19.25	7.79
July „ . . .	1.65	10.73	2.04	2.14	7.65	1.81	2.71	4.61	1.96	2.75	22.53	12.92
August „ . . .	1.07	11.18	1.83	.70	8.40	1.48	1.13	5.99	2.36	2.68	21.07	9.85
September „ . . .	.23	10.58	1.51	.14	7.16	.94	.16	4.63	2.29	.09	13.95	4.17

193. Before May there was no special cause for the mortality, except the prevailing distress; nevertheless, the fever death-rate rose above the average as early as December in the Panch Maháls; as January in Ahmedabad and Broach; and as February in Kaira. The death-rate for dysentery and diarrhoea was above the average from the very beginning. The figures, then, justify the conclusion of the Sanitary Officers that up to May the mortality was mainly due to privation; that from May to the rains the further rise in mortality was mainly due to cholera and that the unhealthiness of the autumn, acting on the reduced physique of the people, is responsible for much of the mortality in the remaining period.

194. These figures must be taken with large reservations, because Gujarat is interlocked with Native States, and the evidence is overwhelming that immense numbers of refugees came across the border in extreme destitution to seek relief in British territory. It is estimated by some officers that at least half the mortality occurred among these refugees. We are not in a position to estimate precisely the effect upon the death-rates of this immigration, but we are satisfied that it was very great, and that much of the mortality attributable to it was not to be avoided by any efforts which British officials could make, owing to the miserable condition in which these people came. Many crawled over the border only to die.

195. But making all allowances, it is not possible to dissociate the mortality from the famine or to regard it as inevitable. We have no doubt that the mortality in the period up to May would have been less had more works been opened near the people's homes in the Kaira and the Panch Maháls districts, and had the provisions of the Famine Code in regard to the distribution of gratuitous relief in the villages been acted upon with due liberality. We are also of opinion that much of the cholera mortality would have been avoided had the provision in reserve

of a scheme of village works enabled the authorities to split up the large works and return people to their homes, and had the organization on the works been more efficient. It is impossible to exaggerate the devotion and self-sacrifice of the local officers in Gujarat during the cholera panic, but the efforts of the individual at such a time are unavailing; success can only be achieved by forethought and pre-arrangement. From June onwards relief was distributed most liberally, but it was then too late; the mischief had been done.

196. The district of Ajmer was distressed in 1898. Relief commenced in November of that year; on a small scale in Ajmer, but on a larger scale in the sub-division of Merwara. In July 1899 relief was discontinued in Ajmer proper; but the numbers continued to rise in Merwara, and by September 1899 the entire district was again distressed. The following are the death-rates from that period to the end of 1900 :—

Month.	DEATH-RATES PER MILLE FROM—					Average death-rate per mille from all causes for the ten years ending 1896.
	Small-pox.	Fever.	Dysentery and Diarrhoea.	Cholera.	All causes.	
September 1899	Nil.	1.50	.14	Nil.	1.95	2.17
October „ . . . . .	.02	1.72	.20	Nil.	2.33	2.19
November „ . . . . .	.07	2.40	.27	Nil.	3.22	2.30
December „ . . . . .	.41	3.44	.55	Nil.	5.10	2.41
January 1900	1.16	4.46	.72	Nil.	7.15	2.34
February „	1.05	3.60	.85	Nil.	6.06	2.61
March „	1.29	4.21	1.23	Nil.	7.50	2.16
April „ . . . . .	.86	4.71	1.62	1.63	9.64	1.96
May „ . . . . .	.35	5.39	1.99	3.96	12.59	1.89
June „ . . . . .	.08	5.03	1.38	2.10	9.44	1.62
July „ . . . . .	.03	4.51	1.51	.69	7.41	1.37
August „	0.1	5.05	1.90	.44	8.25	1.81
September „	Nil.	7.55	1.87	.10	10.26	2.17
October „	Nil.	12.23	1.33	Nil.	14.29	2.19
November „	Nil.	13.50	.82	Nil.	14.94	2.30
December „	Nil.	11.26	.63	Nil.	12.43	2.41

197. From November 1899 to October 1900 the death-rate was 100.91 per mille, as compared with a decennial average of 24.28. The death-rate for the year 1900 was 119.96 per mille, against a decennial average of 24.23. For these high figures fever is mainly responsible, the death-rate under that head being 81.56 per mille against the decennial average of 16.70. The fever figures are otherwise remarkable. Not only did the fever death-rate commence to rise early in the year—the rate in May was 5.39 per mille against an average of 1.16,—but in the autumn the disease became particularly virulent, and affected all classes of the community alike; while the actual and average fever death-rates for the last

Month.	1900.	Decennial average.
September	7.55	1.62
October	12.23	1.77
November	13.50	1.85
December	11.26	1.79

four months of the year, as shown in the margin, were higher than those in any other province. We were informed that in many villages the crops were left uncut because the labourers were all down with fever. Cholera was very severe in April, May and June, and the cholera death-

rate for the year was nearly twelve times the average. Bowel complaints—an unusual form of disease in this dry climate—were also very fatal, owing to the bad and insufficient food of the people; they reached a figure nearly eight times the average.

198. The true facts, however, as to mortality among the inhabitants of Ajmer are altogether obscured by the mortality among the immigrants, both those who came into the district for relief and those who merely passed through it as wayfarers. Immigrants of the former class were attracted by the very liberal scale of wages on relief works in Ajmer; they were also driven to leave their homes by the delays which occurred on the part of the Darbars in opening relief works. As regards the latter class of immigrants, it is well known that every year large numbers of the people of Western Rajputana leave their homes in the autumn with their families and cattle in search of pasture, and proceed through Ajmer on their way. When famine occurs, this emigration very largely increases; it has been calculated that in the great famine of 1868 two-thirds of the population of Marwar emigrated in this manner. Accordingly, when the rains failed in 1899 and the advent of a water and fodder famine was certain, these emigrants left their homes in numbers many times greater than usual. On their outward journey they were for the most part in good condition; but, when disappointed, they came back in the hot weather of 1900, they were almost all in a state of destitution. They flooded the poor-houses and hospitals, and died in numbers along the roads and in the fields.

199. Much of this great mortality was beyond the power of British officers to prevent; but efforts were made to relieve all refugees and to send them back to relief in the States from which they came; and we were glad to learn how willingly most of the Darbars co-operated in the rescue of their own people in the later months of the famine. But immigration does not explain the enormous fever death-rates at the end of the year, which are plainly traceable to the effects of famine; and we think that much mortality might have been avoided had gratuitous relief in the villages been less sparingly given throughout the famine in Ajmer proper.

200. Only five districts in the Punjab were affected, and in all, except Hissar, the conditions were rather those of scarcity than of famine. In Hissar the death-rate was excessively high, and in Rohtak and Karnal it was very great. The following are the death-rates per mille for the year 1900 :—

District.	SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		CHOLERA.		ALL CAUSES.	
	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.	1900.	Decennial average.
Hissar	1·7	·9	70	21·1	3·6	·7	8·3	·8	96	28
Rohtak	·6	·3	51·3	22·6	1·6	·6	3·5	·7	68	31
Gurgaon	2·5	1·1	32·2	25·8	2·9	1·8	1·7	·4	50	37
Delhi	·5	·4	34·1	27·4	2·6	1·7	·6	·6	54	43
Karnal	·2	·8	55·4	19·8	1·8	·7	2·0	·8	74	31

201. A special enquiry regarding the death-rates in Hissar and Rohtak elicited the fact that the fever in the early months of the year was of a non-malarial type, and was aggravated by famine conditions. On the relief works the mortality was not high. In all these districts, as in Ajmer, very high fever rates were recorded in the closing months of the year. We have no doubt that much of the mortality was due to an unusually unhealthy autumn acting upon a population predisposed to disease by privation.

202. We have now stated and analyzed the death-rates in the various provinces that we visited, and the final result may be exhibited in the following tabular form:—

Provinces.	Death-rate per mille, 1900.	Death-rate per mille, decennial average.	Percentage of excess in 1900.
Central Provinces	56.68	34.50	64
Berar	82.4	38.8	112
Bombay (affected districts)	83.55	29.72	181
Ajmer	119.96	24.23	395
Punjab (affected districts)	73.3	35.3	108

We must, however, point out that this comparison of death-rates and variations from the average contains elements of great uncertainty. In the first place, the death-rates of 1900 are largely swollen by deaths of immigrants, a large proportion of which British officers were powerless to prevent. In the second place, the practice, followed in these provinces, of calculating rates on the figures of the census of 1891 is misleading.

203. With a view to presenting a concrete idea of the mortality due to famine, we have ascertained the total number of deaths actually recorded in 1900 in the famine-stricken districts, and we have contrasted it with the decennial average of recorded deaths, for the same areas. This decennial average would ordinarily be a fallaciously low standard, as the population in the earlier years of the decade would fall short of the population in the later years. But this source of error may possibly be neutralized in the case of most of the areas under notice by abnormal influences in recent years, among which plague and famine were conspicuous. The result is exhibited in the following tabular statement:—

Province.	Deaths recorded in 1900.	Decennial average of deaths.	Excess in 1900.
Central Provinces (excluding zamindaris)	539,234	351,548	187,686
Berar	236,022	110,096	125,926
Bombay (excluding Sind)	1,218,650	473,274	745,376
Ajmer	65,067	14,609	50,458
Punjab	245,978	118,569	127,409
Total	2,304,951	1,068,096	1,236,855

It thus appears that the recorded deaths in 1900 were something more than double the decennial average of deaths, and that the toll taken by the famine in British districts was about one million and a quarter lives. But all who died in British districts were not British subjects. Very many were immigrants from Native States, who, as we have already stated, came across the border in a deplorable condition. It is, however, impossible for us to say how many of these immigrants helped to swell the death-roll of 1900. But although we can make no statement with authority as to the proportion of the million and a quarter excess deaths which should be allotted to the population of British districts and Native States respectively, the impression which the evidence as a whole leaves upon our minds is that one million excess deaths occurred among British subjects. Of the total excess mortality we consider that at least one-fifth was due to cholera.

204. Lastly, we have examined the provisional returns of the late census in the hope that they might throw some light on the mortality of 1900, but we have been disappointed. As we have already pointed out, the last decade has been one of distress, broken into by plague and by one and in some cases two famines: at the end of such a period it is impossible to estimate the effects of a single year's famine. The following comparative statement of the census figures for 1891 and 1901 is given for what it is worth:—

Province.	IN AFFECTED DISTRICTS ONLY.			
	Population in 1891.	Population in 1901	Variation in number.	Percentage of variation.
Central Provinces	10,784,294	9,845,318	—938,976	—8.71
Berar	2,897,040	2,752,418	—144,622	—4.99
Bombay	12,277,576	11,584,072	—693,504	—5.64
Ajmer	542,358	476,330	—66,028	—12.17
Punjab	3,357,817	3,730,599	+372,782	+11.10
Total	29,859,085	28,388,737	—1,470,348	—4.92

These figures are necessarily inconclusive, but they illustrate the fact that the last decade of the nineteenth century was generally one of misfortune and distress.

SECTION XX.—*Preservation of Cattle.*

205. The great mortality of cattle in the recent famine has pushed to the front the question of their preservation in times of drought and dearth of fodder. Such fodder famines are fortunately rare. In an ordinary famine, when the crops fail at a late stage of their growth, there usually remain sufficient straw and grass to save, at any rate, the useful cattle; but the recent famine has been abnormal in this respect. It is estimated that nearly two million cattle, local and immigrant combined, died in the Central Provinces and its Feudatory States; and that an equal number died in Bombay. The mortality was also great in Berar and in Ajmer, in which latter district no effective measures were taken to

prevent it. Nor was this mortality confined to the useless cattle; valuable bullocks and breeding cattle have perished in thousands, involving a loss to agriculturists, from which even with the liberal assistance of Government, it will take them long to recover. This loss was most severe, as its results were most disastrous, in Gujarat, where the fodder famine was complete, and where the wealth of the people was largely sunk in their cattle. In their efforts to save their cattle the Gujarat agriculturists expended all their savings, themselves enduring great privations; they sold their jewels and even the doors and rafters of their houses we were told, in order to purchase fodder. Their efforts failed, their cattle died, and with their cattle all their accumulated wealth disappeared, so that Gujarat became a stricken field.

206. Whether, in the face of a serious fodder famine, any measures will prevent the death of cattle in large numbers may, indeed, be doubted. In the Central Provinces, where the conditions were very favourable to success, well considered and sustained action was taken by the authorities. The free cutting of grass was allowed; the means of watering were provided, as far as possible; forests were thrown wholly open to grazing; and grass was given away in large quantities. The province had, in fact, as a whole, more than sufficient fodder for its requirements, and exported large quantities both of grass and *jawári* straw. And yet the cattle died in immense numbers. Much of this mortality was doubtless due to a deficient and polluted water-supply, but much was directly attributable to the generally unfavourable conditions which prevail in times of famine.

207. In Bombay relief measures were conducted on a scale hitherto unknown. From the very first the Government foresaw the results of the fodder famine, and no opportunity was lost of attempting to mitigate them; but the conditions were such, in that Presidency, that no efforts of the Government could achieve more than a partial success.

208. In spite, however, of this discouraging experience, we are strongly of opinion that in future strenuous attempts should be made to save at least the valuable cattle, and the experiments made in the recent famine, if they have not given results commensurate with the expenditure, encourage the hope that by systematic and well directed action much may be done.

209. Events in 1900 suggest the adoption and development of the following measures of relief, subject to limitations, which we shall describe. Some of these measures are likely to be more successful than others, but there will generally be room for more than one of them. They are—

- (1) the stimulation of the growth of fodder crops during the period of distress, especially by the grant of loans;
- (2) the importation of fodder, and the grant of loans to purchase it;
- (3) the deportation of cattle to the forests;
- (4) the preservation of cattle in camps.

210. *Growth of fodder crops.*—We attach special importance to this remedy, not only because the fodder grown on the spot is much more valuable than the stuff imported, but because it has the collateral advantages of saving the cost of transport, of avoiding delays, of employing

local labour, and of keeping the cattle at home. In Gujarat the cultivators were stimulated to grow fodder by liberal help in the form of loans to make temporary wells, and by the assurance that no fodder crop should be attached for the payment of revenue. And, although full advantage was not taken by the people of the liberality of the Government, the efficiency of this form of relief was amply demonstrated. It has also been brought to our notice that temporary irrigation from streams by means of engine power may on emergency add largely to the fodder supply and yield a high commercial profit.

211. *The importation of fodder.*—Next in usefulness to the growth of fodder in the villages we place the importation of fodder from outside; for we believe that it is better in the long run, and cheaper, to bring fodder to the cattle than to take the cattle to the fodder. Much was done in this direction by the Bombay Government, but the effective action of Government was small in comparison with that of private trade. The difficulties are, no doubt, considerable, but we think that they may be overcome, and that there is a great opening for private enterprise if aided by the Government. As an illustration of success, upon a small scale, in this matter, we would mention that as much as 19,000 tons of fodder were imported into one of the small States of Kathiawar during the famine, wholly by private enterprise.

212. It is necessary that State and private enterprise should co-operate, and there are two essential conditions of success :

- (a) that the demand should be proclaimed at a very early date;
- (b) that the railways should be able to cope with the traffic.

Neither of these conditions was fulfilled in the recent famine. Owing to uncertainty as to requirements at the outset, the grass was cut much too late, after it had seeded and dried into woody fibre; moreover, the forests had in many cases been damaged by grazing, and much useless and dirty fodder was brought into the market. We were informed that the grass imported into Gujarat was, on the whole, of less than half the nutritive value of *jawári* fodder and that much of it was so inferior that it could not be digested. Again, it is in evidence that large stocks of fodder, State and private, were kept waiting at the railway stations for want of wagons to carry them away. There is no reason, however, why with due forethought these difficulties should not be surmounted in another famine; and we have made recommendations in connection with railways which tend in this direction.

213. A solid objection to the importation of fodder is its cost on arrival. It was found impossible, for instance, to deliver grass in Gujarat at a price much below ₹30 a ton, a price prohibitive to the majority of cultivators. To the removal or mitigation of this objection every attention should be paid. For example, the cost could be reduced by more careful baling, for which arrangements in advance can provide. Again, enquiries should be made, in years in which there is no pressure, with a view to supplementing the fodder supply on emergency. For instance, the deficiency or inferiority of grass can, to a large extent, be made good or counteracted by rations of oil-cake, preferably the cake of *til* (sesamum); and this food, being highly concentrated, can be imported far more easily and cheaply than fodder. It is also in evidence that

the Rangoon Mills can supply rice hullings of considerable dietetic value in any quantity and at low rates, the cost of carriage being small. Sustained enquiries conducted by the Agricultural Departments will doubtless result in further suggestions, which should be published in due course for general information.

214. There is this pre-eminent advantage, in our opinion, in the growth and the importation of fodder that it enables the people to retain the cattle in the villages. Not only does this avoid the dangers that always attend a change of environment, but it is directly economical, inasmuch as a far smaller amount of imported fodder will suffice per head for cattle kept at home, where the people can supplement the imported ration by petty reserves and pickings such as stubble and the scanty herbage of the wastes, the loppings of trees and hedges, and prickly pear. It is another direct advantage of retaining the cattle in their village that they will be in readiness for work at the first fall of rain—a matter of the highest importance, as shown last May in the Deccan districts of Madras, where, owing to the presence of the cattle in the villages, large areas were successfully sown on the occurrence of a single heavy downfall of rain. It is an additional argument in favour of the establishment of village works (with which we have already dealt) that owners and their servants are not forced either to abandon their cattle by resorting to distant works, or to stay and suffer privation in their villages in the hope of saving their cattle. In cases of acute fodder famine it may be necessary to put the common herdsmen of the village cattle on the village gratuitous relief list.

215. *The deportation of cattle to forests.*—We do not think it advisable to put pressure on the people to send their cattle to the forests, for the risk of mortality is great in the case of cattle which are unused to the forests; while cattle used to the forests will be sent there without pressure. The experiments made in this direction cannot be said to have been successful. Of the Gujarat cattle sent to the Thana forests 60 per cent. died, and it is estimated that two-thirds of those sent to the forests in Berar perished. The coarseness of the grass, the change of water, or again the scantiness and insufficiency of the water-supply, as well as the neglect of the hirelings in charge, are fatal to carefully reared and stall-fed beasts. The cost of deportation by rail, the risks of the journey by road, and the danger of destruction by aboriginal tribes at the end, are additional weighty objections to State-aided deportation.

216. We think, nevertheless, that the forests should be opened to all who are prepared to take the risks. The question then arises whether grazing should be free. It has been represented to us that large numbers of useless cattle wander in the forest, consuming grass which is wanted for more valuable beasts, and trampling down more grass than they consume; and it has been suggested that, to avoid these disadvantages of free grazing, a small fee should be levied. We consider that the objections to unrestricted grazing are very weighty in cases when the supply of grass is likely to be limited and a demand for its export is likely to spring up. And we recommend that in such circumstances restrictions should be placed on free grazing, either by selection of the

cattle, which should be allowed access to the grazing grounds, or by the imposition of a fee.

217. *Cattle camps*.—Where it is possible to save the cattle in the homes of the people, it is desirable to do so, for no one will look after them so well as their owners. But, when the stress is so severe that cattle are abandoned or sold for a nominal sum, cattle camps serve a most useful purpose in preserving valuable breeds. These camps were managed with excellent results in Gujarat; and, to a smaller extent, in Rajputana. As the accommodation of a camp is limited and great risks are involved in overcrowding, it is necessary carefully to select the cattle, and we think that admission should generally be restricted to selected cows with a few bulls of the best breed. Experience suggests that it is better for Government to buy the cattle and re-sell them at a fair price, to their former owners if possible, at the end of the famine, than to keep them at the risk and at the cost of the owners. We would also add that veterinary supervision is essential to the successful management of a camp.

218. It is scarcely necessary to say that private cattle camps conducted on scientific lines should be liberally supported by Government in every way. But generally these private camps do not discriminate between useful and worthless cattle, the practical result too often being merely to afford *euthanasia* to useless kine. While we regard with respect the sentiments which inspire endeavours of this kind, we feel bound to point out that they can hardly be considered successful from the economic point of view.

219. Finally, we recommend that the whole question of fodder-supply in its preventive aspect, be thoroughly examined by the Agricultural Departments of Local Governments. Apart from the general questions of the improvement of agricultural practice, the storage of hay has been suggested to us as a useful reserve against a fodder famine. There is no doubt that in ordinary years vast quantities of grass are wasted, which, if cut at the right time, stacked and properly protected against rain, will, especially if pressed, remain good for many years, and form an ample reserve against famine. It is possible that well directed experiments in converting this grass into hay and placing it on the market might inaugurate a useful industry, which private enterprise would develop in ordinary years and greatly expand in times of famine. The cost of such experiments might fairly be charged against the Famine Insurance Fund, if, indeed, the Government did not see in them a legitimate object of outlay in view of the advantage on military grounds of having a reserve of hay.

220. The destruction of trees for the sake of their leaves was a marked feature of the famine of 1900. As a reserve, used to some extent in every season, the leaves of trees are valuable, and the planting of the class of trees and shrubs most useful for fodder has obvious advantages. In Gujarat many fields are hedged with a useless *Euphorbia*; and the substitution of shrubs useful for fodder would be advantageous.

221. The possibility of an extended use of prickly pear might also be investigated; though not sufficient as the main article of diet, the leaves, if carefully prepared and supplemented with oil-cake, bran, straw, pulse, etc., will serve, we understand, to keep cattle alive.

SECTION XXI.—*Railways.*

222. "In the last famine," according to the famine report of the Central Provinces, "when exports were carried away in the early months, people pointed to the railways as an aggravation of their ills; in this famine they have regarded them as their salvation." Such oscillations of feeling serve to illustrate two aspects of policy and two schools of thought. On the one side there is the party which looks to railways to stimulate production by assisting the distribution of wealth: on the other side there is the party which sees in railways, and the export of food from the country which they facilitate, a cause of poverty and a solvent of those habits of storing grain which were formerly, it is asserted, a safeguard against famine. The latter party have forgotten, it would seem, the lessons of the famines of 1837, 1866 and 1877 (not to go further back) when, so far from the habits in question proving a safeguard, millions perished from hunger owing to the want of railways. They have also apparently forgotten the lesson taught by the famines of 1897 and 1900, that, owing to the existence of railways, there was never in these years a dearth of food in any famine-stricken tract. There can be no doubt that the community at large benefits by the more effective circulation of the reserve stocks of food, and that it is in the backward tracts, as a rule, that famine is soonest and most severely felt. It is true that to a certain extent cultivators, who formerly stored grain, because it could be neither sold nor removed, have ceased to do so because they can sell to advantage; and that, owing to their improvidence, the money slips through their fingers. But this change in the habits of the people is a regular attendant of progress; it is merely a transient phase of a great economic movement, which makes for national prosperity and which is promoted by education and by those methods for promoting thrift to which we shall refer in the third part of this report. Taking a comprehensive view of the facts, we can find no substantial or lasting support for the contention—on the face of it a paradox—that the poverty of the agriculturist is permanently increased by the opportunity of getting a high price for his produce.

223. But the substitution of the great reserves of the country at large for the petty reserves of individuals demands an increasing efficiency in the means for rapidly moving them. Indeed, it is not easy to exaggerate the importance of having sufficient rolling stock to cope with the traffic demands of a famine. Many complaints have been made against the railways of shortcomings, during the last year, in regard to the carriage both of fodder and of grain. With a view to test these complaints, we called for statistics from all important railways, but we regret that we are unable to connect them together in an intelligible form. There is, however, sufficient evidence on record to satisfy us that, though the railways as a whole did their best under conditions of severe trial, the results were not adequate to the urgent necessities of the time. It is a matter of common knowledge that in the North-Western Provinces and Oudh the goods sheds and platforms were crowded for weeks together with grain consigned to famine-stricken tracts and only waiting for wagons to be taken there. Complaints from the grain dealers were numerous of enforced and injurious delay. How far this delay affected the

level of prices in the famine districts, we have no means of ascertaining; but obviously it must have had some prejudicial effect, and we consider the matter of such importance as to call for immediate action.

224. The Famine Commission of 1880 anticipated that with the growth of the railway system the quantity of rolling stock would increase in proportion, and that the wants of the country would be supplied with the least possible burden on its resources. Whether the rolling stock is sufficient for the business of the country in ordinary times is a matter of dispute, with which we have no concern; it is enough for our purpose that it has been proved insufficient for the requirements of a widespread famine. We are convinced that the inability of the railways to carry all the food that was offered affected prices in the famine districts; and that the failure to carry fodder, in anything like the quantity required, has resulted in the loss of large numbers of agricultural cattle, which it will take long to replace. To increase the rolling stock is, in our opinion, one of the most urgent questions of famine insurance.

225. On State railways the necessary action can be at once taken; elsewhere the problem is less simple. If private enterprise is ready in the matter, it should, we think, be encouraged in every way; indeed, we consider that the interests of the State are sufficient to justify some sort of guarantee. If private enterprise does not move in the matter, then we consider that there is a case for action by the State. The suggestion of a general reserve of rolling stock belonging to the State, but held for the use in ordinary times of all Indian railways, is an old one; it was considered and rejected as impracticable by the Famine Commission of 1880. The question has again been revived, and we strongly recommend that it be submitted to careful examination. We are aware of the objections to such a proposal; but there are also compensating advantages. It is conceivable that a reserve of rolling stock might yield a large commercial profit; it is obvious that it might be of high military advantage. But in any case it is urgently required, in order that it may be equal to the traffic in times of famine, and any losses incurred in connection with it would, in our opinion, be a fair charge on the Famine Insurance grant.

SECTION XXII.—*Weavers.*

226. The Famine Commission of 1898 agreed with the Commission of 1880 that it was desirable, where convenient, to relieve artisans of whom weavers are the most numerous, through their own trades, one of their reasons being that it is important to maintain all crafts by which people are supported independently of agriculture. They were, also, of opinion that a carefully managed, businesslike scheme is not open to any of the objections usually urged against this class of relief; and that it would probably not result in a greater loss to Government than that caused by employing the weavers on the ordinary relief works. This opinion is more than confirmed by experience, and is now, we believe, accepted in every province except Bombay.

227. In view of this general agreement no elaborate statement of the case is required. It is, however, important to differentiate between two different classes of weavers. Many, especially in the rural tracts such

as the Pariahs of Madras and the Dhers and Mahars of the Central Provinces, combine ordinary labour with weaving as a subsidiary occupation; others by caste and occupation are solely weavers, usually occupied in weaving of a special or superior character. For the former class, and for scattered members of the latter class, the ordinary methods of relief alone are necessary or practicable, unless charitable persons or bodies give them work at home; the latter class are generally met with in communities, as a rule in considerable towns; their habits are generally sedentary, and they are unable to work in the sun; and for these groups State relief, through their own trade, either direct or through municipal or local authorities, is as desirable as it is practicable and economical.

228. It is sometimes objected that it is useless to prop up hand loom or cottage weaving in the face of mill competition. But in fact the two industries supply different wants. The coarse and durable cloths of the hand looms are still preferred in many parts of India by field workers and labourers, while the more delicate and peculiar products of those looms still hold the market. Mills do not, we understand, compete with either of these classes of goods. Again, it has been objected that the employment of weavers at their own trade will lead to an abnormal or artificial output, resulting in a glut of the market and depressed prices. It would, however, seem a sounder argument that but for the famine the weavers would have been continuously at work and that the output would have been normal, whereas the results of famine relief operations will be an output below the normal, because the work is low-paid task work with a maximum limit to earnings.

229. On the other hand, the arguments in favour of this special relief are very weighty. It will be enough to mention the following:—

- (1) It is an obvious advantage to assist an existing craft, which, notwithstanding mill competition, is an important factor in the industrial life of the country.
- (2) The results of such relief are marketable commodities, whereas the results of ordinary relief works are excavations or road banks or heaps of metal, which are frequently either useless or not required, except as providing work for famine labour.
- (3) Such relief is less costly than the ordinary forms of relief.

230. This argument of economy is, in our opinion, strong. There is evidence to show that in several cases special relief operations resulted in a net profit. In the famine report of the Central Provinces it is stated that "this form of relief, though involving heavy initial expenditure, is one of the least expensive in the end." Practically the whole stock of cloth is still on hand in the Central Provinces, but on a valuation of it the incidence per unit relieved is less than one pie as compared with $1\frac{1}{2}$ annas per unit relieved on relief works. If, therefore, the cloth sells at a reasonable price, as may be expected, the result must be considered very successful. In Madras, on the other hand, practically the whole stock of goods—though of a peculiar character and saleable only in Bombay and the Central Provinces—has already been sold, and the results give an incidence of cost *per* weaver relieved of 4 annas a month. The experience gained in 1897 was similar in effect. We go further,

therefore, than the Commission of 1898, and recommend the general adoption, wherever possible, of this special relief.

231. There remains the choice of system. In Madras relief is administered direct to the workers: while middlemen are employed in the Central Provinces and Bombay. There is evidence that under the middleman system, whether the middleman was a master-weaver, broker, or merchant, the workers were sometimes cheated or sweated; that the middleman sometimes paid the workers improperly low rates, in order to work off old debts due by them; and that workers were excluded from relief, either because they refused the middleman's terms, or because they were not in debt to him. These disadvantages are absent from the simplified Madras system, under which relief officers deal direct with the workers. Under proper supervision, however, the middleman system is found to work well; and we consider that each administration should select its own method or methods according to custom or convenience. Under both system the freest use should be made of non-official agency. In the conduct of such operations municipal committees, private associations, missionaries and Native gentlemen have, in all parts of the country rendered admirable service.

SECTION XXIII.—*Orphans.*

232. The treatment of orphans in certain districts during the recent famine has been criticised in the evidence given to us and in the public press. Influenced, we doubt not, by motives of humanity, European and Native philanthropists took charge of deserted children during the course of the famine, and in some instances despatched them to private orphanages and homes in distant parts of the country. This action no doubt saved the lives of many helpless children, but it has given rise to misunderstanding, and we consider it of great importance that the policy of the Government in regard to orphans should be formulated in Provincial Codes, beyond risk of misconception either by its officers or by the public.

233. That policy should clearly recognize and proceed upon the facts of famine. It is common experience that, besides those children who are true orphans, others are deserted by their parents or relatives in the stress of famine, and reclaimed when it is over; it is also common experience that relatives and caste-fellows and sometimes co-religionists are ready to adopt orphan children at the end of a famine.

234. The State should be, in time of famine, the temporary guardian of children whom it finds deserted, and should not, in our opinion, divest itself of the care of them, until a reasonable period has elapsed after the close of the famine, during which efforts should be made to discover the natural protectors of the children, or, failing these respectable persons of the same religion who are willing to adopt them. Deserted children should not be made over to persons or institutions of different religions until all efforts to find persons and institutions of their own religion willing to take charge of them have failed. To secure the satisfactory working of these principles, it is, we think, desirable that subsidiary rules should be framed in each province (those of the

North-Western Provinces and Oudh Famine Code appear to us to proceed on the right lines), and that every public famine orphanage should be periodically inspected by a non-official committee, comprising gentlemen of different religions.

235. In regard to children brought into private orphanages and institutions during a famine, we consider that a register should in each case be maintained giving full particulars regarding them; that a copy of this register should be periodically forwarded to the District Magistrate, in order that he may make enquiries for the parents or relatives of such children; that free access to the children be at all times allowed to the District Magistrate and persons claiming as parents or relatives to remove them: and that, in the event of the parentage or relationship being, in the opinion of the District Magistrate, satisfactorily established, the children should be made over to such persons. We also recommend that no unclaimed child be removed from the district in which it is found until a period of three months has elapsed after the close of relief operations in the district.

SECTION XXIV.—*Suspensions and Remissions of Land Revenue.*

236. In the third part of our report we discuss at length the principles by which suspensions and remissions of revenue should be regulated in adverse seasons not amounting to famine, and the different procedure to be followed in such seasons according as crop failure is local or widespread. The only adaptation of those principles required in times of famine is a more than ordinary liberality in the interpretation of them. The necessity for such liberality as a measure of relief is generally recognised and need not be examined in detail; but we desire to draw attention to its political expediency. Any harshness in the collection of land revenue, particularly in a *ryotwari* province, goes far to reduce, if it does not obliterate, the gratitude which the people feel towards the Government for their rescue from starvation. For harshness strikes home with double force upon the revenue payer in times of famine, when, owing to the general depression of credit, he can only realize on ornaments and other property a small proportion of their ordinary selling value.

237. Starting, then, with the principles which we discuss and formulate elsewhere, we need only here insist upon two conditions as vital to the proper application of this form of relief in times of famine, namely,—

- (1) that very early enquiries should be made regarding suspensions, as a measure of moral strategy and to put heart into the people; and
- (2) that orders thereon should be widely made known before the first instalments—of rent in *zamindari* and of revenue in *ryotwari* tracts—fall due, in order that the people may know how they stand and not be exposed to harassment and loss.

The results of the action taken since the commencement of the recent famine are tabulated below :—

Provinces.	Land revenue demand.		Amount of land revenue remitted.			Amount of land revenue suspended.			Proposed further remission of amount suspended.			Percentage of remission proposed to amount suspended.		Percentage of total remission made and proposed to the land revenue demand.	
	(Omitting 000.)		(Omitting 000.)			(Omitting 000.)			(Omitting 000.)			(Omitting 000.)		(Omitting 000.)	
	For the revenue year 1899-1900.	For the revenue year 1900-1901.	For the revenue year 1899-1900.	For the revenue year 1900-1901.	Total.	For the revenue year 1899-1900.	For the revenue year 1900-1901.	Total.	For the revenue year 1899-1900.	For the revenue year 1900-1901.	Total.	For the revenue year 1899-1900.	For the revenue year 1900-1901.	For the revenue year 1899-1900.	For the revenue year 1900-1901.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				
Central Provinces . . .	86,27,	86,41,	...	...	...	55,94,	...	55,94,	42,68,	...	42,68,	76	...	49	...
Berar	78,41,	77,85,	1,23,	...	1,23,	1,67,	...	1,67,	...	...	...	...	...	2	...
Bombay (affected districts), .	2,48,31,	2,25,05,	5,38,	19,04,*	24,40,	78,48,	45,74,*	1,24,22,	29,64,*	...	29,64,	38	...	14	8
Ajmer	3,53,	3,91,	...	...	...	2,18,	1,74,	3,92,	68,	46,	1,15,	32	26	18	12
Punjab (affected districts) .	44,21,	44,21,	...	...	...	20,54,	...	20,62,	...	...	...	...	...	...	...
Total	4,61,06	4,37,43	6,69,	19,01,	25,63	1,58,81,	47,53,	2,06,37,	73,01,	46,	73,47,	...	...	...	...

* These figures are estimates and are exclusive of the figures for the Panch Mahals, which have not been reported.

238. The suspensions in the Central Provinces in the year 1899-1900, it will be seen, were very liberal, amounting to 65 per cent. of the total demand. The original proposals for suspension, which were sanctioned by the Government of India, amounted to Rs. 60,25,000, or very nearly three-quarters of the demand. But "in certain cases, at the time of announcing to the people the amounts suspended, it was found that more rents had already been collected than were compatible with the full concession sanctioned." This is an illustration of the importance of early action in the matter of suspension. General proposals were not called for until the 20th December 1899, so that the advantages of moral strategy were lost to some extent; but the suspensions ultimately made were so liberal, and the general policy of anticipating the hopes of the people was so well known, in the Central Provinces, that we are not disposed to criticise the results. The policy in other respects was entirely in accordance with the principles which we lay down elsewhere; its object was to assist the cultivator, who under the tenancy law of the Central Provinces, can only be reached through the landowner. The amount of the suspension followed closely the degree of general crop failure; and the procedure was from aggregate to detail. The remissions proposed are equally liberal, and in view of the misfortunes through which the province has passed, we think that this liberality is both necessary and wise.

239. In Berar less than 2 per cent. of the land revenue demand for 1899-1900 was remitted, and suspensions were made in addition to the extent of rather more than 2 per cent. This relief was, in our opinion, altogether insufficient, if the information supplied to us by the local officers was correct—that the *kharif* and *rabi* harvests were total failures. These unsatisfactory results have, moreover, been reached by enquiry into the circumstances of individuals—a procedure which in times of famine ought, in our opinion, never to be followed.

240. The policy of the Bombay Government in regard to the collection of the land revenue is stricter than that of any other Government in India. The smallness of the suspensions and remissions granted in 1897 was, according to the Commission of 1898, "the most questionable feature of the scheme of relief adopted." "It would appear," the Commission said, "that the Bombay Government has given up its old principle of treating all the revenue payers of a village alike in the matter of suspensions and remissions; but owing to the imperfections of the records it is not easy now to say who is the true revenue payer, and who is or is not in a position to pay. It is also evident that the Government felt it necessary to be rather harder in the matter than it would have otherwise been in consequence of an agitation originating in Poona." In the recent famine a far greater measure of liberality was accorded; but the action taken gave rise to much criticism and disputation. Of the demand for the year 1899-1900 a sum amounting to 78½ lakhs, or a little more than 31 per cent. of the whole, is shown as suspended. Of this balance 74 lakhs were due in the following districts of the Northern and Central Divisions :—

District.	Land revenue demand in 1899-1900. (Omitting 000.)	Amount of land revenue suspended. (Omitting 000.)	Percentage of demand suspended.
	Rs.	Rs.	
<i>Northern Division.</i>			
Ahmedabad	15,43,	9,73,	63
Kaira	21,09,	12,34,	58.5
Panch Mahals	3,27,	1,99,	61
Broach	22,18,	14,99,	67.5
<i>Central Division.</i>			
Khandesh	42,39,	11,98,	28.2
Nasik	16,39,	2,43,	14.8
Ahmednagar	16,41,	7,14,	43.5
Poona	13,53,	6,23,	46
Sholapur	11,45,	2,24,	19.5
Satara	19,48,	4,84,	25
Total .	1,81,62,	73,91,	41

241. The term "not collected" would perhaps be more correct, because there was no general declaration of suspension, and the amount suspended was in effect the balance outstanding at the end of the year. The action of the Bombay Government was directly in conflict with the principles which we consider to be vital in times of famine. Beyond a general knowledge that those who had not the means would not be expected to pay, the people did not know their position. The decision as to who had the means to pay was determined by enquiry into the circumstances of individuals; and this enquiry was based, of necessity, on the reports of subordinate village officials. The orders of the Local Government were peremptory and clear that "nobody should be forced to borrow in order to pay the assessment," and the subsidiary instructions as to the classification of the revenue payers were theoretically well adapted

to attain this object. But in practice the classification could not be satisfactorily carried out, and local officers appear to have felt themselves restrained by the limit which, in October 1899, the Government assigned to the estimates of suspension.

242. This was particularly the case in Gujarat, where the original estimates of probable suspensions submitted by the local officers, amounting to 35 lakhs of rupees, were cut down by the Government to 16½ lakhs, on the ground of experience in 1896-97. "In that famine," said the Government, "the most liberally treated district was Bijapur, the suspensions in which amounted to nearly 20 per cent. of the demand. The Governor in Council is not inclined to allow a larger proportion of the revenue to be suspended in any district of Gujarat." This estimate of the Government was never explicitly withdrawn; but on the 16th January it was repeated with an important qualification: "Government with some confidence expect that Gujarat will pay as large a share of the revenue this year as the Deccan did in 1896-97, if the orders are applied in a reasonable manner, and see no reason at present for modifying the estimates of suspensions which they have reported to the Government of India, but the important point to which the local authorities should give their careful attention is to apply the orders properly and the result will show which estimates are the more accurate." We have no desire to enter into controversies between any Government and its officers, but, as the circumstances of the present case have been publicly discussed, we feel bound to record our opinion that much misunderstanding and much harassment and loss to the people would have been avoided had the Local Government fixed definitely at an earlier date what the limit of suspension was actually to be, and had fixed that limit on a liberal consideration of the existing pressure. At the same time we must observe that the qualification attached to the Resolution of the 16th January, when read with the general instructions of Government, gave local officers a large discretion in the matter.

243. Recent orders of the Bombay Government recognize the necessity for promptitude and liberality in this form of relief; but that Government adheres to the view that enquiry into the circumstances of individuals is necessary. We have no doubt that in practice both of these objects cannot be attained; that one of them must be sacrificed to the other. While, then, we consider that the results of the year's collection of land revenue are consistent with great moderation, and while we recognize that there has undoubtedly been combination against the Government and default among those able to pay, we are strongly of opinion that the procedure followed has, to a large extent, neutralized the effects of that moderation, and we see in the dissatisfaction which has been excited, notwithstanding the large sum suspended, the strongest confirmation of the principles of early determination and speedy announcement of the amount to be suspended, which we shall advocate hereafter.

244. It should be added that the revenue collection of the current year is being conducted with apparent moderation, and that remissions are apparently being granted on a liberal scale. But we are inclined to think that the liberality of the Government in this matter also will be

largely discounted by the abuses which are inseparable, during times of widespread crop failure, from a system of enquiry into the circumstances of individuals.

245. In Ajmer liberal suspensions and remissions have been made in two successive years. The relief was given uniformly over large areas, and the only criticism which we have to offer is that it would have been an advantage had the intentions of the local authorities been published at an early date. As it was, the people were left to find out that the revenue was not to be collected.

246. Suspensions in the Punjab were liberal, amounting to 46 per cent. in 1899-1900 of the demand in the affected districts. In Hissar, which is already burdened with the arrears of the last famine, the amount suspended in 1899-1900 was 82 per cent. of the demand—a leniency which we have no doubt, was called for. The most interesting feature of the procedure followed in the Punjab has been the practical abandonment of the attempt to differentiate between rich and poor revenue payers where the crop failure has been widespread. “Generally,” wrote the Financial Commissioner in August 1900, “the practice has been to determine from the crop returns of the whole village what proportion of the total demand should be suspended and then to deduct from the amount to be suspended

so much as is payable by rich landowners. In some districts* suspensions have been granted after an enquiry into the assets of each holding, but this procedure has usually been held to be beyond the powers of the district staff. In Hissar, where the effects of the famine have been felt by all classes, no differentiation has been made. In Rohtak also differentiation was considered impracticable, and it may be pretty confidently said that in those parts of the district which were really hit by famine, and in the Kaithal tahsil of the Karnal district, which was similarly afflicted, there was a suspension of the total demand. The same remark applies to parts of the Gurgaon district.”

*The report refers to the whole province, only a few districts of which were distressed.

247. One great objection to differential treatment between rich and poor landowners came prominently forward in the Punjab, namely, that it deprives the tenants of protection in provinces where a suspension or remission of revenue is a condition precedent to the suspension or remission of rent. In the Punjab the area cultivated by the landowners themselves is unusually large, and the Local Government in November 1899 ordered that “the principle of differentiation should not be enforced

* * against landlords *quâ* the holdings of their occupancy tenants, whether such tenants pay rent in cash or in kind.” But there remains a considerable body of tenants, without occupancy rights, who specially need protection in times of famine, and who fail to get it if differential treatment is accorded to rich and poor landowners. We point this out as a defect of principle, not as a defect of practice, for in practice, differential treatment was abandoned in the famine districts.

248. In the Punjab the question of remissions is usually held over for three years, the local officers meanwhile collecting what they can from harvest to harvest. At the end of three years the balance outstanding is usually remitted. We are aware that in precarious districts like

Hissar the revenue is so extremely light that a good crop leaves a margin sufficient to pay off extensive arrears. But we are none the less of opinion that uncertainty in the demand is a great evil; and we gather that the discretion left to local officers in Hissar resulted in the collection of arrears between the two famines, which the district was not really able to pay.

249. Looking to the figures for all provinces as a whole, we are of opinion that, except in Berar, great liberality has been shown to the people in the matter of suspensions and remissions of revenue during the famine, but that defects in the administration, which can in future be avoided, have detracted from the results which that liberality ought legitimately to have secured.

SECTION XXV.—*Advances by Government.*

250. The importance of advances under Act XII of 1884 and Act XIX of 1883, as a means of relief to agriculturists in times of famine, is now generally admitted. It is necessary, however, to insist that these advances lose a great part of their value if they are not given at the proper time. Advances under the Agriculturists' Loans Act (XII of 1884) are most profitably given for the purchase of seed grain for the *rabi* harvest at the very commencement of the famine; and again for the purchase of plough cattle and seed in the months of May and June in anticipation of the *kharif* sowings. The periods during which advances may be most usefully distributed under the Land Improvement Loans Act (XIX of 1883) are less restricted; they may with advantage be given until the hot weather draws to a close; but we have already pointed out that they, as well as the advances under the sister Act, are specially required in the very earliest stages of the famine, as a measure of moral strategy and to put heart into the people. The following table will show at a glance the total sums advanced, and the extent to which the advances were made at the times when they were most required :—

Province.	Under Act XII of 1884.				Under Act XIX of 1883.			Other than under Acts XII and XIX.	Grand Total.
	September, October, and November 1899.	May and June 1900.	At other times.	Total.	September, October, and November 1899.	At other times.	Total.		
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central Provinces .	1,81,936	22,90,719	11,35,549	36,08,204	6,618	1,62,906	1,69,524	38,158	38,15,886
Berar . . .	6,836	72,219	1,44,574	2,23,629	36,938	3,19,733	3,56,671	3,690	5,83,990
Bombay* . .	5,58,378	21,33,384	55,75,282	82,67,044	2,54,490	24,88,075	27,42,565	1,40,000	1,11,49,609
Ajmer . . .	1,041	9,699	3,48,730	3,59,470	6,028	1,16,943	1,22,971	...	4,82,441
Punjab* . .	79,972	1,98,579	16,54,765	19,33,316	35,182	26,327	61,509	14,840	20,09,665
Total .	8,28,168	47,04,600	88,58,900	1,43,91,663	3,39,256	31,13,964	34,53,240	1,96,688	1,80,41,591

* Affected districts only.

251. In the Central Provinces the sums issued for land improvement were inconsiderable, the explanation given being that the land-owning classes were not in a position to take loans for private works, and

that private and non-departmental works could not be carried on side by side. We are unable to accept this view; and we would note that in the earlier stages of the famine, when the usefulness of private works is greatest, non-departmental works will not ordinarily be in competition with them. We regard the decision of the Central Provinces Administration in this matter as unfortunate, and as infected by the despondency which prevailed in the Central Provinces at the outset. Similar in character, we think, was the decision not to issue loans in 1899 to purchase seed for the *rabi* crop, in the belief that it would not germinate. This apprehension finds expression in every famine, and is generally contradicted by the event. On the other hand, the arrangements made for the distribution of advances in anticipation of the rains were praiseworthy; and the amount advanced was liberal, although it is in evidence that larger sums might with advantage have been distributed. We would specially notice with approval two methods adopted in the Central Provinces:—

- (i) *The separation of the process of selecting recipients from the process of actually distributing the money.*—This procedure is followed in ordinary times elsewhere, but was thoroughly systematized on the present occasion. Its advantages were great in allowing selection to be made at leisure, and thus reducing the influence of underlings; while the early distribution of orders for payment at a future date increased the feeling of security and general credit, prevented the misuse of loans, and doubtless stimulated the importation of large quantities of grain for seed.
- (ii) *The system of taking a joint bond from the cultivators of each village.*—This “not only saved an enormous amount of clerical labour, but by imposing on the community a joint responsibility, it prevented money being wasted on totally undeserving people, and imposed the restraint of his co-borrowers upon any *ryot* who was disposed to misuse his advance.”

252. In Berar the amount advanced was comparatively small, and we think that the distribution for the *kharif* of 1900 might with advantage have been made at an earlier date.

253. The total amount advanced in the famine districts of the Bombay Presidency reached the unprecedented sum of Rs. 1,11,49,609. Compared with the figures for the other provinces, the sums advanced at the beginning of the famine were considerable, but they were insignificant when compared with the total amount advanced in the Presidency. The advances made under the Land Improvement Loans Acts—24 lakhs from November to the end of May—appear to have been timely. But of 82½ lakhs issued under the Agriculturists' Loans Act, 49½ lakhs were distributed after the end of June, and 30 lakhs after July. We have already noticed the character of the rains policy in Bombay, and we think that, had relief operations in this Presidency been conducted from the outset on the lines we have indicated, it might not have been either necessary or desirable to make such very heavy advances after June. We do not say that in the actual circumstances of these later months the advances ought

not to have been made, but the impression left upon our minds is that a large portion of them cannot be recovered, and that they were to a large extent gratuitous relief in another form.

254. In Ajmer the advances were small. The greater part of the advances under the Agriculturists' Loans Act were distributed in July (Rs. 2,15,772) and August (Rs. 1,27,044). It is stated in the famine report that the July advances were made in good time for the rains; but this remark does not apply to the advances made in August, and we cannot help thinking that much of the usefulness of these advances was lost by delay.

255. In the Punjab rather more than half the advances were distributed in the Hissar district. The amount advanced under Act XIX of 1883 was small in amount, considering the distress. With a view to secure the *rabi* of 1900, efforts were made to stimulate the sinking of wells in Hissar, but without great results. Generally the loans were issued rather late.

256. While, therefore, there can be no doubt that these liberal advances did immense good to the distressed tracts, we think that, owing to untimely distribution, a considerable proportion of the money advanced was not agriculturally effective. We do not, however, share the view that these advances are misused and misappropriated to any large extent. Individual cases of the kind may easily be discovered, but "it is the general belief," says the Chief Commissioner of the Central Provinces, "that the proportion wasted in these ways was very small." In all branches of famine administration some risk must be run, and it is by their broad effects that measures must be judged. Judged by this test, the system of advances, when administered prudently and with forethought, is a most efficient instrument of relief, and one which can be to a very great extent freed from the pauperizing influences of State charity.

257. But this latter characteristic will be lost if lax notions of obligation are allowed to affect the question of the recovery of the advances. Due regard should, of course, be paid to the nature of the subsequent seasons and the circumstances of the recipients, but otherwise the repayment of advances should be strictly enforced. We consider it of even more importance, when the preservation of the self-reliance and honesty of the people is in question, to assist on the repayment of *taqávi* loans than to insist on the payment of arrears of land revenue. To rescind a special contract has a more demoralizing effect upon the popular mind than to relax for once the demand of the State to which the people are accustomed and the obligation of which is undeniable. In the interests, therefore, of the public faith, which depends largely on the recognition of the obligation attaching to contracts, as well as with the object of maintaining and strengthening a spirit of independence among the people, we think that the recovery of advances should take precedence of the recovery of arrears of land revenue in the settlement of liabilities which follows a famine.

PART III.

PROTECTIVE.

SECTION I.—*Introductory.*

258. In the preceding part of this report we have, in compliance with our instructions, dealt, so far as the incidents of the famine administration of last year were concerned, with "the collection of the land revenue * * and the extent to which relief was granted to distressed owners and occupiers of land by revenue suspensions or remissions," and with "the use made of the loan system (*tagávi*) or other advances in the various provinces." But we have also been asked to make suggestions for improvement, should we think that existing arrangements in regard to suspensions and remissions of revenue or in regard to *tagávi* loans press with undue severity on the owners or occupiers of land, or fail to give them the full relief that is intended.

259. In dealing with the collection of the land revenue, as committed to us in its broad aspects, we were at once confronted with two questions; first, whether the land revenue demand in the various provinces was fair in amount; and, secondly, whether it was sufficiently elastic to be payable year by year without risk of causing indebtedness. It is necessary to treat these two questions separately.

SECTION II.—*Pressure of the Land Revenue.*

260. To form a conclusion as to the fairness of the land revenue assessment, it is essential to ascertain its incidence upon the gross produce of the soil. Into this problem four factors enter, namely, the area under cultivation, the incidence of land revenue per cultivated acre, the crop outturn and the selling price. For the provinces which have been cadastrally surveyed and which maintain an efficient land record staff, the first two factors are clearly ascertainable in any year; the second two are variable. But the error incident to the variable factors can be reduced. In the case of crop yield or outturn, the potential error can be reduced by the degree of carefulness with which crops are inspected and selected for experiment, and by the variety and number of the experimental cuttings and weighings made. In the case of selling prices the possibility of error can also be reduced by careful, comprehensive and continuous record of the prices current at harvest and other times. The danger of over-valuation in the matter of crop outturn may be further guarded against by excluding from the calculation of crop yield the produce of all double or second crops; by excluding from consideration all non-food crops, such as sugarcane, cotton, etc., which are usually more valuable than the staple food crops; and, finally, by taking no count of the very valuable garden produce. All these safeguards against exaggeration of the value of the outturn have, at our request, been adopted by the Agricultural Departments in making the calculations which they have furnished to us, and they clearly make for a crop valuation under the mark. The following facts emerge from the agricultural and revenue

statistics prepared in this way and furnished to us with regard to each province.

261. In the Central Provinces the average yield per acre of staple food crops is shown as 595 lbs., and the average value as Rs. 15-5-0. As, in the Central Provinces, the incidence of land revenue per cultivated acre is $8\frac{2}{3}$ annas, it follows that the land revenue* is less than 4 per cent. of the average value of the outturn. The incidence of the land revenue on the gross produce does not reach 7 per cent. in any district of the Central Provinces, while in only two districts does it exceed 5 per cent. Even if the variable factors in the preceding calculation, namely, the rates of crop yield and the money commutation rates, are reduced by 25 per cent., *i.e.*, to 447 lbs. and Rs. 11-8-0, respectively, the incidence of the land revenue on produce will still fall under 5 per cent., or, if cesses be added, slightly over 5 per cent. Upon the basis of these figures it is clear that the incidence on the produce of the land revenue assessed in the Central Provinces is extremely moderate.

262. This conclusion is confirmed by the evidence of independent non-official witnesses whom we have examined, and by a representation which the Nagpur Málguzárs' Association has addressed to us. In this representation the landlords do not so much find fault with the schedules of rental or assets on which the land revenue was based as with the share of the assets which the Government has appropriated. In other words, their contention is not that the tenant contributes too large a share of the produce of his holding to his landlord and the Government, but that the Government leaves the landlord too small a share of that contribution. Into this matter we are not here called upon to enter, as it raises a different issue from that under our notice, which is the pressure of the land revenue on the cultivators. But we may observe in passing that for the Central Provinces, as a whole, the share of the assets (53 per cent.) taken from the landlords as revenue at the recent settlement is considerably less than the share (61 per cent.) taken at the previous settlement. In the Central Provinces, as in Northern India, the tendency is for the State to take a diminishing share of the assets as revenue. We commend this tendency, believing that it is sound fiscal policy.

263. In Berar the land revenue falls at Re. 1-2-9 per cultivated acre, representing 13 per cent. of an acre's outturn of staple food crops. The oral evidence, however, points to a revenue incidence of about 7 per cent. of the gross produce, and this is, in our opinion, a reasonable estimate. The explanation of this difference is that in Berar the non-food crops occupy rather more than half the cultivated area and, it would seem, the better lands. Cotton, of a superior quality, by itself occupies, on the average, one-third of the net cropped area.

264. The agricultural statistics which have been supplied to us for Ajmer and for the Delhi Division of the Punjab show that in those tracts also the incidence of revenue on the produce is moderate. In the *khálsa* or *ryotwári* area of Ajmer the incidence is Re. 1-7-1 per acre, which is equivalent to about 10 per cent. on the gross produce; for the *istimrári* area no data are given. In the Hissar district of the Delhi Division,

* In addition to land revenue, local rates and cesses to the extent of $11\frac{1}{2}$ per cent. on the land revenue are also levied.

which is a precarious tract, the incidence is very low, being only $7\frac{1}{2}$ annas per cultivated acre, or about $3\frac{1}{2}$ per cent. on the normal produce; but in the other districts it averages a little over a rupee per acre, or about 7 per cent. on the produce, except in the Delhi district itself, where it rises to ₹1-11-10 per acre, or 10 per cent. on the produce. We concur in the local opinion that the incidence of land revenue in these regions does not interfere with agricultural efficiency in ordinary years. In adverse seasons, however, there is a distinct need for leniency, and this is recognized by the orders of the Local Government.

265. The figures supplied by the Bombay Land Records Department indicate that the incidence of the land revenue in the Deccan is about Re. 1-3-0 per acre, and that it absorbs about 7 per cent. of the gross produce. The Bombay district officials, whom we have examined, are generally of opinion that the revenue is moderate, herein agreeing with the Deccan Commission of 1891*; on the whole, however, they place its incidence on the gross produce higher than the Land Records Department does.

266. We ourselves are disposed to think that the assessment in these Deccan districts is a full assessment for tracts where "the soil is sterile, the climate precarious, a good crop being in some parts obtained only once in three years, and the peasantry, though sturdy and ordinarily law-abiding, are described as utterly uneducated and with a narrow range of intelligence."† But whether the assessment be moderate or full, we have no doubt that it cannot be collected in short years without forcing the *ryots* into debt.

267. Except in the Panch Maháls, where the land revenue is shown as about 5 per cent. of the produce, this figure being due to the backward character of the people and their primitive methods of cultivation, the assessment in Gujarat is a full one, taking 20 per cent. of the produce. Notwithstanding this, the Deputy Director of Agriculture considers that the profits on cultivation in Gujarat are greater than in the Deccan, and we have no doubt that this is so. An assessment of 20 per cent. of the gross produce in a fertile *ryotwári* region like Gujarat is not greater than the rent which landlords in many districts of Northern India levy from their tenants for lands of even less productiveness. But, when landlords in Northern India take such high rents, they are obliged to allow suspensions in bad years.

268. We have now stated for each province visited what is, according to the statistics and evidence placed before us, the pressure of the land revenue on the soil. We are aware that in such a complex matter averages are exposed to error; and that the liability to error grows with an increase in the number of diversity of the rates and scales on which the averages are struck. But we have been as careful as we could be in the circumstances, and we feel confidence in the general correctness of our conclusion. Our general conclusion is that, except in Bombay, where it is full‡, the incidence of land revenue is low to moderate in ordinary

* The Deccan Commission of 1891 reported that, "though the localities they visited included some of the poorest tracts of the four districts, no complaint of assessments being too heavy were made to them, and all the evidence pointed to the conclusion that the revenue is, on the whole, moderate."

† Secretary of State's Despatch on the Report of the Deccan Riots Commission.

‡ Mr. Nicholson considers that this statement applies only to parts of the Bombay Presidency.

years*; it should in no way *per se* be the cause of indebtedness. But it has been proved by experience in all provinces that the cultivators (*i.e.*, in *ryotwari* tracts the *ryots*, and in *zamindari* tracts the tenants) fail to lay by from the surplus of good years a sufficiency to meet their obligations when bad years come. In every country the small farmer, whose capital is sunk in his land and his stock, is usually short of ready money when the crops are deficient. This want of ready money is perilously aggravated in India by the total absence of even rudimentary provision to encourage thrift or to secure safe borrowing. Consequently there is in adverse years peculiar need in India for elasticity in the demands made on the cultivator, whether these be revenue or rent. Unless therefore provision for suspension and remission of revenue and rent (and in the case of rent for a proportionate relief to the receiver of the rent) be an integral part of the revenue system in any province, the cultivator will be forced to borrow on conditions incompatible with his solvency and independence. The importance of suspensions and remissions of revenue and rent is consequently very great. Even these, however, do not strike at the root of the matter; the true remedy and preventive of indebtedness will be found in the promotion of education; in the development of proper and popular institutions for organized credit and thrift at the very doors of the cultivator; in the removal of the causes inherent in the agrarian system of the country, which force the cultivator into debt; and in the advancement of agricultural efficiency in all its branches.

269. With the question of popular education we are not here concerned, though we cannot pass it by without a recognition of its importance: on the other questions mentioned we proceed to indicate our recommendations under the following heads:—

- Suspensions and remissions of revenue and rent;
- Agricultural banks;
- The system of granting *taqavi* loans;
- Organic changes in the existing agrarian system of Bombay, which has led to undue indebtedness; and
- The improvement of agriculture.

SECTION III.—*Suspensions and Remissions of Revenue.*

270. The importance of suspensions and remissions of land revenue as a palliative in times of famine was recognized by the Commissions of 1880 and 1898. In the views expressed by both Commissions on the point we fully concur: but we also desire to go further and to emphasize the value of suspensions and remissions of revenue as a preventive measure of constant application in adverse years. Considerable advance

* Comparisons between the existing assessment of land revenue and assessments attributed to former native Governments have been made, to the disparagement of the former, in the Indian press. These comparisons are of antiquarian rather than of practical interest: but they are in any case unjust. The fact is that the ruling power in India has always been entitled to a share of the produce of the soil as land revenue. It is not known whether a precise theoretic share existed in early Hindu times, though one-sixth is mentioned; but we have in the *Ain-i-Akbari* an authoritative contemporary record of what the share and the method of assessing it were in the most highly organized and efficient native Administration that India has had. Briefly stated, the land was classified according to its productiveness: the average outturn over a cycle of years of the various crops sown in each class of land was determined (20 kind of crops for the spring and 32 for the autumn harvest are enumerated); a general average outturn for each kind of crop was struck, "one-third part of which is exacted as the royal dues." This one-third part was then commuted into money on the basis of prices recorded for each crop and for each year of a 19-year cycle. We know that this third part of the produce was constantly exceeded under the pressure of State necessity, or by farmers who contracted for the payment of the land revenue; but, apart from such excesses, it is manifest that in the Moghal *régime* the land revenue assessments were far more severe than any now enforced by the British Government.

in this direction has, during the last twenty years, been made in every province, except Bombay; and in Bombay a large proportion of the officers whom we examined are now in favour of a change of policy. But, while there is much agreement as to the general policy which should be pursued in this connection, practice varies greatly in the different provinces.

271. In the North-Western Provinces agricultural calamities are divided into two classes: (1) those causing serious deterioration of the soil, and (2) those injuring a particular harvest. In cases of the first class the revenue is at once postponed, as a preliminary to suspension or remission, or to a reduction of revenue for a period not exceeding five years. In cases of the second class, the general circumstances and history of the village are regarded, including the stress of the assessment on it. In all cases, the primary objects for consideration are the extension of relief to the tenant and the adjustment of the means by which this object can be attained. The following scale of relief is laid down for general guidance:—

4 annas loss of produce	...	...	...	No relief.
6 " "	...	...	...	2 annas suspension.
8 " "	...	...	...	4 " "
10 " "	...	...	...	8 " "
12 " "	...	...	...	12 " "
Over 12 " "	...	...	...	Reasonable remission

The relief point is, thus, six annas' loss of crop. Where the calamity is widespread, relief is uniform on all round village estimates of the loss. Where the calamity is local and isolated, relief is given field by field after local enquiry. Generally the order of relief is first postponement, then suspension, and finally remission. The Collector has power to postpone; but suspension and remission, which carry with them relief to the tenantry, require, under the existing law, the sanction of Government.

272. In the Central Provinces the rules are both less liberal and less elaborate. No action is contemplated on a loss of less than three-quarter of the crop. No scale of relief is laid down. But the Deputy Commissioner has power to suspend for a month, and the Commissioner has power to suspend without a time limit up to Rs. 5,000. Suspensions of revenue are made conditional on suspensions of rent.

273. In the Punjab the rules look back to the character of the settlement; and agricultural calamities are divided into (1) those contemplated by the Settlement Officer in making his assessment and (2) those which were not foreseen at the time of the assessment and for which no allowance was then made:—

(1) In cases of the first class—such as irregularities of rainfall, failure of irrigation or periodic inundations, injury by drifting sand, or the like—enquiries are only made by holdings when the injury is purely local; the character of the original assessment is closely scrutinized with a view to appreciating the allowance than made for calamities; remissions are given with greater reserve than in cases of the second class; and differential treatment is meted out to rich and poor proprietors.

(2) In cases of the second class—such as destruction of crops by

locusts, heavy floods, or similar wholly unforeseen accidents—enquiries are made by holdings; remissions are the rule; and the wealth or poverty of the individual proprietor is not taken into consideration.

274. Remissions in the Punjab are not given outright; the Deputy Commissioner decides at each harvest how much of the outstanding arrears can be collected, and at the end of three years whatever has not been recovered is usually remitted. The local officers in this province appear to be given greater discretion than elsewhere; and the precise degree of crop failure entitling to relief is not definitely fixed.

275. In Bombay there is at present no system of suspensions or remissions in ordinary years; but the terms of the Famine Code give Collectors ample powers of suspensions in the case of "an abnormal failure of the harvest causing total or almost total destruction of the crops over a considerable area," and direct that such suspension should be eventually followed by an enquiry into each case as to the desirability of collection or remission. It appears, however, that the executive orders of the Bombay Government have taken away the discretion allowed to Collectors by the terms of the Code.

276. In Berar the Bombay rule has been adopted.

277. In Madras, as in the Punjab, the rules, we understand, look back to the character of the assessment, though in a somewhat different way, and the practice varies according to the extent of the crop failure. In ordinary years, when the failure of the crops is only local and isolated, remissions, preceded by suspensions, are by the standing orders allowed at the annual settlement for any failure of the crops on lands assessed at *wet rates*, which is due to a want or excess of water. The remissions are based on field to field enquiry, which the elaborate system of continuous crop inspection in this Presidency permits. Remissions are not usually given in ordinary years for crop failure on lands assessed at dry rates, a liberal allowance being made in the assessment for the precarious nature of the cultivation on these lands. In very bad seasons, however, when the crop failure is widespread, general suspensions are at once allowed, and remissions are granted on all lands, whether assessed at *wet or dry rates*, according to a regular scale. That scale begins with a possible 25 per cent. remission for yields between one-half and one-third of a normal crop (taken at 12 annas), and ends with a remission of from 75 to 100 per cent. for yields below one-sixth of a normal crop. The affected area is divided into small homogeneous tracts; the ratio of the remission to the assessment is fixed for each of such tracts; and every field obtains its proportionate share, except those scheduled as *protected*. Under neither method is there any differential treatment of rich and poor *ryots*; and it is a feature of the Madras system generally that the amount of the relief is published at a very early date in order that every *ryot* may know how he stands.

278. The conditions in *zamindari* and *ryotwári* tracts are different, but a careful examination of the rules and of their working in the recent famine shows that, in essentials, the underlying principles are the same. We desire to lay special emphasis on two conclusions:—

- (i) We are of opinion that it is of cardinal importance to relieve the cultivator, whether he be the revenue payer himself, as

in *ryotwári* tracts, or, as in *zamindari* tracts, the tenant of the revenue payer. In *zamindari* tracts it is not, in our opinion, sufficient to make the suspension or remission of revenue conditional on a suspension or remission of rent. The Government should have, in all cases, authority to order suspension or remission of rent. In some provinces legislation to this end will be required, and we recommend it.

- (ii) It follows that in *zamindari* tracts the wealth or the poverty of the revenue payer, who is a rent receiver, should not influence the question of suspension or remission: it is necessary to give relief to him in order to relieve the cultivator. But in *ryotwári* tracts the differential treatment of rich and poor *ryots* is undoubtedly a practical question which has given rise to considerable discussion.

279. While expressing to us their opinions in favour of a system of suspensions, and possibly remissions, of land revenue in years of crop failure, the majority of Bombay officers wished to exclude money-lenders altogether from its benefits, and we found that a similar feeling on this point exists in some other provinces. No doubt there are arguments in support of this view. If the revenue is moderate, and the revenue payer is rich and intelligent (as many money-lenders are), he may be fairly called upon to pay in a bad year from the surplus he has laid by in a good one. If the system of land records and the subordinate revenue staff were such in any province as to enable the Government to classify its revenue payers into pure agriculturists and capitalist owners of land, it might be reasonable to show to the former a greater measure of leniency in the matter of revenue payments than the latter would require. But, so far as we know, the land records system of no province permits of such classification being made; an attempt at differentiation has been made in the Punjab, but with no satisfactory results; in Bombay the attempt has inevitably failed. Moreover, the subordinate staff in every province is of such a character that personal enquiries into the means of individuals not only lead to endless corruption, but involve a delay which is fatal when promptitude is essential to relief. Furthermore, as a matter of fact, very many of the money-lending owners of land are small men, trading on borrowed capital, or cultivators themselves, who are in need of considerate treatment. After all money-lenders have their uses, and we think it very bad policy to alienate them, for they are at present the principal capitalists who are willing or able to finance the cultivators.

280. We are therefore strongly of opinion that in the case of suspensions differential treatment between rich and poor should not be attempted, because it is bad in policy and difficult in practice, and because it—

- overlooks in *zamindari* tracts the needs of the tenant;
- involves delay when promptitude is essential to relief; and
- opens the door to favouritism and corruption, as the differentiation must in practice be made on the recommendations of unreliable subordinates.

The following is the scheme of relief which we recommend :—

I.—General.

281. It is necessary to lay down the degree of calamity, which calls for relief, and the degree of relief suitable. It is desirable to fix the relief point low in order to secure that enquiry is made in all cases of extensive crop failure; but ordinarily, we think, relief will not be required when there is half a normal crop.

II.—Suspensions.

282. In the case of widespread crop failure relief should proceed from the general to the particular. In such a case general estimates for homogeneous tracts or groups of villages or larger territorial areas should be made; and upon these estimates uniform suspension (*i.e.*, of revenue in *ryotwári* tracts, and of rent in *zamindari* tracts) should be worked out.

283. If the calamity is local and isolated, relief should proceed, on the other hand, from the particular to the general. Field to field enquiry should be made, as suspensions should follow the result of such enquiries.

284. In *zamindari* tracts, if the revenue payer is himself the cultivator, the considerations which apply to a suspension of rent should determine in his case the suspension of revenue; but, if he is a rent receiver, the suspension of revenue should be proportionate to the suspension of rent.

III.—Remissions.

285. It is essential that an early decision should be reached as to the amount of suspended revenue which should be at once remitted, and that the balance should be spread over two or three years for collection. We are strongly of opinion that instalments should be fixed, and that the whole amount should not be left over from harvest to harvest at the discretion of the local officers. It may not be possible to collect the instalments fixed; but even so, uncertainty in collection is less oppressive and demoralizing than uncertainty in demand.

286. Remissions, not less than suspensions, should start with the cultivators, *i.e.*, in *ryotwári* tracts the *ryots* and in *zamindari* tracts the tenants. If the calamity has been widespread, remissions should be uniform with a view to the general relief of the cultivators. If the calamity has been local and isolated, remissions should follow individual enquiries as to the circumstances of the cultivators.

287. In *zamindari* tracts, if the revenue payer is himself the cultivator, the considerations which apply to a remission of rent should determine in his case the remission of revenue; but if he is a rent receiver, the remission of revenue should be proportionate to the remission of rent. Justice demands this treatment for the rich no less than for the poor. But there may be cases when a liberal policy may require for the poor proprietor a remission of revenue more than proportionate to the remis-

sion of rent. In such exceptional cases only do we recommend differential treatment of the rich and poor : while we do not seek to penalize the rich, we desire to help the poor in fuller measure. We believe that in this matter a generous policy is the wise policy; and that to have preferences, but no exclusions, is the best working rule.

SECTION IV.—*Agricultural Banks.*

288. We attach the highest importance to the establishment of some organization or method whereby cultivators may obtain, without paying usurious rates of interest, and without being given undue facilities for incurring debt, the advances necessary for carrying on their business. Agriculture, like other industries is supported on credit. "The *saukár* is as essential in the village as the ploughman," said the Secretary of State in reviewing the Report of the Deccan Riots Commission, and the statement is true in existing circumstances. But, owing to causes, which it would be tedious to trace, the *saukár* or *bania* has, from being a help to agriculture, become, in some places an incubus upon it. The usurious rates of interest that he charges and the unfair advantage that he takes of the cultivator's necessities and ignorance have, over large areas, placed a burden of indebtedness on the cultivator which he cannot bear. Passed on from father to son, and continually swollen in the process by compound interest, this burden of indebtedness has become hereditary and retains the cultivating classes in poverty, from which there is no escape, that we can perceive, except through State assistance, or the discovery of some other means by which the cultivator may get, on easier terms, the accommodation that he needs. But even the fuller measure of State aid in the shape of *taqávi* loans, which we shall recommend, will go but a small way towards removing the difficulties of the whole class. Government cannot possibly finance all the cultivators of a district, still less of a province. In the establishment of Mutual Credit Associations lies a large hope for the future of agriculture in India; and from the enquiries we have made there is reason to believe that, if taken up and pressed with patience and energy, such associations may be successfully worked.

289. This question is, we believe, to come shortly under the consideration of the Government of India, but it is necessary that we should call attention to its importance here. The subject was broached by us in all the provinces that we visited, and was everywhere regarded with interest. Moreover, as the Government of the North-Western Provinces and Oudh has actually taken steps to put the principles of rural co-operative credit into practice, we think it well to offer a few brief remarks on the direction which, in our opinion, a practical scheme of Agricultural Banks should follow.

290. The underlying idea in all Mutual Credit Associations, such as we recommend, is that a number of persons, by combining together, create a new and valuable security, which none of them previously possessed as individuals. Co-operation substitutes for isolated and helpless agricultural units a strong association competent to offer guarantees and capable of inspiring confidence. The advantages of lending to groups instead of to individuals need no demonstration. It is simpler for

a creditor to deal with a group of fifty or a hundred associated cultivators than with the same number singly; it is simpler for him to obtain repayment from the group than from each of the members composing it; it is simpler for the group to make its own arrangements with each member than for the lender to try to do so. By the same process of reasoning, it is simpler for a Central Agricultural Bank to deal with groups of associated cultivators in each village than to make any attempt to deal with each cultivator singly.

291. To obtain the full advantages that co-operation offers, any group of cultivators, voluntarily associating together to obtain credit on their joint responsibility must agree to abide by certain recognized rules. Notwithstanding the difference between eastern and western conditions, the rules of the Raiffeisen credit associations are probably the best that, subject to necessary modifications, any similar association in India could adopt. On this point some further remarks are required; but before offering them, we desire to remove some misconceptions, which our enquiries have shown to prevail, both as to the scope of village banks and as to the fundamental principles which should regulate their working.

292. It should be understood from the outset, and made perfectly clear to all concerned, that the establishment of a village bank does not imply the creation of an institution from which the villagers may draw money at their discretion. A village bank, based generally upon the Raiffeisen system, admits no one to membership who does not fulfil certain conditions which are essential for the safe conduct of the bank's operations; it works only for the benefit of its own members, and it grants no loan except for purposes connected with the promotion of agriculture. It is most important that these objects and limitations should be clearly understood, so that there may be no disappointment afterwards and no unnecessary alarm caused to the old established village money-lender.

293. We have been told by some non-official witnesses that, if Agricultural Banks do not lend for miscellaneous purposes, they stand no chance of succeeding, and by other witnesses that, if they do lend for miscellaneous purposes and thus compete with the money-lender, they are sure to fail. We think that both apprehensions arise from a misconception of the objects in view. It is not intended to frighten the village money-lender by permitting a village bank to enter into competition with him over the whole field of his business; still less is it the intention to encourage borrowing for unproductive purposes. No association borrowing on the joint responsibility of its members would be justified in devoting any of its funds to loans for unproductive purposes. It does not consequently enter into the scope of a village bank's operations to lend for marriage festivities or for caste feasts or similar objects. If people wish to borrow money for such purposes, or for any other purpose unconnected with agriculture, they must still go to the village *saukār* or *bania*. The co-operative agricultural bank only aims at freeing the great business of the cultivator's life from the terrible burden, which now presses on it owing to the usurious interest taken for agricultural loans.

294. To sum up, the objects of an Agricultural Bank of this kind may be thus enumerated :—

- (1) To enable its members to obtain loans at reasonable rates for agricultural purposes by placing them in a favourable

position to borrow, and by assisting in the creation of a new credit, which individually they did not possess.

- (2) To provide them with a secure place, in which to deposit their small savings.
- (3) To encourage thrift, by holding up before the eyes of the members the principle that money should not be borrowed unless for reproductive purposes.
- (4) To promote co-operation among the village community in all agricultural affairs.

295. Having thus defined the scope of an Agricultural Bank's operations, we next wish to enumerate the principles upon which they are usually based. They are as follows :—

- (1) There should be unlimited liability : members must be jointly and severally responsible for all the obligations contracted by their society.
- (2) The area in which the village institution works must be well defined and restricted to narrow limits.
- (3) Members must be carefully selected, and none admitted but those of approved character.
- (4) All services in connection with the bank's administration must be gratuitously rendered.
- (5) There should, in general, be no paid up capital.
- (6) All net profits are payable, not as dividends to members, but to the reserve fund, which must be indivisible.

A few words of explanation on these conditions are necessary.

296. Unlimited liability is insisted on, because under such conditions a few ordinary villagers can readily provide a guarantee sufficiently strong to satisfy the requirements of those persons willing to lend money to them at reasonable rates. It remains to be seen whether the principle of limitation by guarantee will not be equally efficient and more acceptable. The feeling of joint responsibility induces each member to exert himself to the utmost to safeguard the common interest; it compels caution in the distribution of loans to members, and causes them to hesitate over the introduction of any new members likely to cause loss to the association by unpunctuality or backwardness in making payments.

297. The limitation of area is an absolutely necessary condition in the case of a society which relies so greatly, as a safeguard against loss, on the bond of common interest, on the influence of social pressure, and on the intimate knowledge the members have of each other's character and affairs. Usually the members of a village bank should all be residents in the same village or in the same group of villages, provided that no one lives further than three or four miles from the bank's headquarters.

298. The selection of members is one of the principal factors in the success of a village bank, which should never contemplate going to law to recover any of its advances. Loans are made to members on their personal security, guaranteed according to the amount of the loan by the security of one or more other members. The greatest care at the outset must be exercised in the choice of the original members. The latter may be safely relied upon to exercise discrimination in the admission of new members, because the loss that may be caused to the society, by the failure

of a borrower and his sureties to fulfil their obligations, will ultimately fall on the whole body of members.

299. Gratuitous services in connection with the bank's business are desirable, because, as the bank works only for the benefit of its own members, and the primary object of the society is to facilitate the obtaining of loans at reasonable interest, any expense would have to be borne by the society and would tend to nullify the object in view. Moreover, such gratuitous service directly tends to foster a sense of public duty and the acquirement of business habits. As a village bank does not meet usually more than twice a month, and the proceedings do not occupy more than an hour or so, the amount of labour devolving on the office bearers is trifling.

300. The formation and indivisibility of the reserve is one of the great sources of strength to a village bank. As the association starts without any subscribed capital, the formation of a continually growing reserve to supplement the guarantee of the associated members is necessary both to enable the members to obtain better terms when borrowing and to safeguard them from the loss which default on the part of any member might bring upon them. As the members do not associate for the purpose of profit on invested capital, but for the purpose of furthering their common interest, all profits obtained from the bank's operations are carried to a common fund, the joint property of all the members. The division of this fund is forbidden in order to prevent its growth arousing the cupidity of the members and tempting them to break up their society for the sake of small temporary profit.

301. The village bank organized on the preceding principles must obtain at the outset from some source outside itself the capital with which it has to work. In those European countries where the system of agricultural banking has taken root, village banks are largely financed by Central Banks operating on a large scale; but in India there is no hope, in the beginning at all events, that these Central Banks or Joint Stock Companies will come into existence. Efforts must therefore be made to create local agencies. It may be that at first such efforts may not be successful, and in this case there would be, we think, no objection to employing State aid to finance experimental village banks. But the object should be to avoid the intervention of the State, except in the matter of audit and supervision.

302. In the tract of country to be served by village banks there doubtless will be found influential landlords, merchants, and others who, apart even from their desire to take part in a movement for the public good, will find it to their interest to lend their aid. It will be possible to organize these gentlemen into a society for the purpose not only of providing funds for financing the village banks, but also for the purpose of stimulating their formation and guiding their action. The money may be subscribed in shares, each of small amount and bearing interest, say, at 4 per cent., per annum. Such a society should be called the Organization Society: and should there be any difficulty in subscribing the requisite capital, there is no reason why, to begin with, the society should not borrow the amount from Government.

303. In course of time, and when village banks have taken root, the Organization Societies in a district or even in a division may be amalgamated; when this happens, the Central Society would take on itself the functions of financing and controlling all village banks in its sphere of operation. In this scheme the Organization Society would, in point of fact, be an intermediate stage of development.

304. The duties of the Organization Society may be summed up as follows :—

- (1) To promote the knowledge of the principles of co-operative banking in the locality.
- (2) To organize village banks and to supervise their working.
- (3) To grant advances to village banks under its supervision.
- (4) To arrange for the proper audit from time to time of the bank's books.

305. In many districts there are large landlords (we especially instance the Court of Wards, managing estates of disqualified owners) who may themselves wish to establish village banks on their estates and to advance to them, at reasonable interest, the money required for their operations. There is no reason why this should not be done, and why village banks financed by the landlord alone should not work and prosper. But in all cases, whether the bank is financed by one capitalist or by a society of capitalists, it is essential to solvent and successful working that there should be strict attention to business methods and regularity. To ensure this, external supervision and audit are essential.

306. The above is only a brief sketch of the principles, organization and object of village banks founded on the Raiffeisen system. It appears to us that there is in every province, which we have visited, a wide scope for the establishment of such banks : some have been already established in the North-Western Provinces and Oudh. In some provinces the hope of successful working is better than in others, but everywhere there is justification for an effort. No doubt such banks may, in the commencement, meet with opposition from the money-lender, who already occupies the field, and they may also meet with suspicion and half-hearted support from those who do not understand their principles. But Indian native life presents us with instances of co-operation for mutual benefit, and the principle which underlies the Raiffeisen system is not really foreign to the thoughts of the people.

307. The system cannot succeed unless the people themselves aid freely in working it. But, if the experimental banks initiated by the Organization Society take root in any district, the future growth of the movement will be in proportion to the desire of the people to free themselves of their present burden of indebtedness. The system separates the working bees from the drones, and gives the former an opportunity of escape from the disqualifications which now press so heavily on both classes of cultivators alike.

308. The preceding remarks apply to Mutual Credit Associations in their agricultural aspects; the same needs exist and a similar remedy applies in connection with the promotion of rural industries and the relief of artisans. It may, indeed, be possible for one association to combine both forms of relief. But in any case it will be necessary to

legislate concerning the privileges which all such associations should enjoy; this matter is, we understand, already under the consideration of the Government of India.

309. There remains the larger question of encouraging land and mortgage banks and private individuals to apply capital to the permanent improvement of the soil. This was considered in connection with Act XIX of 1883, and we desire to mention it with approval of its general object.

SECTION V.—*Advances by Government.*

310. There is some connection from the historic as well as from the economic stand-point between the establishment of Credit Associations and the encouragement of advances under the Agricultural Loans Acts. The historic connection lies in the fact that it was originally intended to incorporate in the Land Improvement Loans Act a scheme for the creation of Agricultural Banks, although not of the Raiffeisen class. The economic connection lies in the identity of the object, at which both Agricultural Banks and the system of Government advances alike aim.

311. That object is the promotion of agricultural prosperity and the improvement of the cultivator's condition. "The real justification of the policy (of Government advances to cultivators) lies," said the Member in charge of the Bill, which became Act XII of 1884, "in the position of Government as the great landlord of the country, and the direct bearing which the welfare of the cultivator has on its revenues." But a wider view may be taken of the responsibilities of the Government, and its interest in the cultivator as a citizen no less than as a contributor to its revenues justifies it in promoting his industry. The policy of the Taqávi Acts should not be regarded as productive merely, but also as protective; and it is upon the protective aspects especially that we would insist. We recognize the progress that has been made, since these measures were originally introduced, but we are convinced that there is both scope and need for a further extension of the policy in its protective aspect on lines of greater liberality. It will be convenient to deal separately with the two Acts, although many considerations apply equally to both.

312. The Land Improvement Loans Act (XIX of 1883) in its present form rose out of the recommendations of the Famine Commission of 1880. That Commission noticed many defects in the existing law regarding agricultural advances, and their recommendations led to improvements, which, so far as they have gone, have proved beneficial. Still much remains to be done.

313. It is not necessary to enlarge upon the importance, from the protective point of view, of agricultural improvements generally. The Commission of 1880 drew attention to the matter and suggested, among other reforms, the possibility of "extending the practice of Bombay and Madras to Upper India so far as to rule that the assessment of land irrigated from a permanent well should not be liable to enhancement on account of the well at any revision of the settlement, provided the well is kept in efficient repair." This recommendation was embodied in the Bill which afterwards became Act XIX of 1883, and was thus referred

to by the Hon'ble Member of the Governor-General's Council in charge of the Bill during the debate upon it:—

The section, as it left the hands of the Select Committee, proposed to go even beyond the recommendation of the Famine Commission, and to exempt from increase of assessment profits arising from improvements effected by the aid of loans taken under this Act, not merely for such periods as would secure to the maker a reasonable return for his investment, but for all time. In those temporarily settled provinces where cultivation has almost reached its natural limits this principle might perhaps be applied with advantage; but in others where extensive areas are still awaiting reclamation, which can practically yield no return and pay no revenue until irrigated, the enactment of such a hard and fast rule would result only in a useless sacrifice of the prospective financial resources of the State.

314. For these reasons the clause which embodied the recommendation in question was curtailed; and the profits of those improvements, which consist of the reclamation of waste land, or the irrigation of land assessed at unirrigated rates, are still, in Upper India, exempted from an increase of assessment only for a limited term.

315. We have carefully considered this question in the light of the grievous misfortunes which have within recent years afflicted Upper India. Our enquiries demonstrate that there is a field for the construction of wells, tanks and other artificial means of irrigation, to which it would be difficult to assign a limit. It has also been forcibly brought home to us—as it was to the Commission of 1880—that the present terms on which these loans are offered do not attract the owners of land to make more than a partial use of the opportunities held out to them. We are convinced that nothing short of a permanent exemption will stimulate the owners of land to that full activity, which is on every ground so greatly to be desired.

316. We recommend, then, that in all future settlements any increase of assets due to the construction, otherwise than at the expense of the State, of wells, tanks or other artificial sources of irrigation should be permanently exempted from assessment to revenue. We are aware of the objection that it is financially unwise to exempt permanently the increase of assets due to irrigation in the poorer soils, because it is in the poorer soils that irrigation will lead to the largest increase of assets. But this objection is met by the consideration that, from the protective point of view, it is just the poorest soils which are most in need of irrigation.

317. With a view to the encouragement of well sinking, we would also recommend that an expert staff be appointed, with power to disburse loans on the spot. Under the advice of this staff trial wells might be dug, the cost being recoverable from the landholder only if good water is reached. In all cases we recommend that partial or complete remissions should be granted if the well is a failure from causes beyond the borrower's control. The cost of this expert staff and of these remissions should be charged to a fund constituted from the difference between the rates of interest at which the Government respectively borrows and lends.

318. In this connection we would call attention to the recommendation of the Famine Commission of 1880, that the rate of interest should be reduced. It is a matter of financial calculation; but we consider that a rate of 5 per cent. would be sufficient. The principle is already admitted, for in the rules of most provinces provision is made for loans at

low rates of interest, or altogether free of interest, and in Madras and Bombay the ordinary rate for these loans is 5 per cent. But we think the time has come to introduce a general rule of greater liberality.

319. Although the rules in this respect are generally liberal, something may also be done to stimulate improvements by a more careful adjustment of the payment of interest to the time when the profits begin to accrue, and by lengthening the period allowed for repayment of the principal. We also think that permission should be given to Local Governments to substitute for recovery of the principal the imposition of a permanent charge on the land irrigated from the well.

320. In the course of a Resolution of the Bombay Government dated 25th July 1884, justifying the policy of charging an increased revenue on land which possessed the advantage of sub-soil water, it was stated that the cultivator would be "stimulated to utilize the sub-soil water by this method of assessment." The evidence that we have taken indicates that this hope has not been realized. Indeed, this method of assessment has apparently created much dissatisfaction in Gujarat. It was pointed out that the incidence of a "water advantage" rate is unequal and unfair; for while the rich and large landholders can construct wells and recoup themselves, the poor cultivator, with a small holding and without capital to construct a well, must pay the rate without hope of recoupment. It was said, moreover, that the holdings of cultivators even when they are not poor and unable to build wells, frequently consist of patches of land situated in many "fields," widely scattered over the village, and that it could not possibly pay to construct a well for any one patch. In these cases it is urged that a "water advantage" rate is a mere addition to the assessment with no fair justification. These objections to a "water advantage" rate seem to us to be very weighty, and we are unable, in the face of the results, to reconcile its existence with the liberal policy of the Bombay Government in foregoing all additional assessment on account of wells constructed by private enterprise.

321. The reclamation of waste land is of less importance from the protective point of view than the extension of irrigation, but we consider that this also is a factor of protection. We recommend that in the case of reclamation, exemption should be granted for the term of the current settlement, or for the term of fifteen years, whichever last expires; and that in the succeeding settlement, or for the remainder of the succeeding settlement, assessment at half rates should be allowed.

322. Our recommendations apply with equal, if not greater, force to improvements made directly by private capital. Such improvements are apt to escape notice in the absence of a proper system of registration; and no effort should be spared to make the rules, for concessions to improvements made from private capital, and for their registration widely known.

323. The Agriculturists' Loans Act (XII of 1884) has been to some extent more successful than the sister Act. But there is one great objection to the present system—that the relief does not reach the cultivators, who are most in need of it. The conditions of security are strict, and the desire of subordinate officials to avoid all risk of loss in collection is strong. The result is that these loans in ordinary times reach only

the more substantial and solvent cultivators, who are the least in need of them. The cultivator who is struggling in deep waters cannot hope to profit by a *taqávi* advance. He is in debt because he is poor; and his poverty prevents him from obtaining the means of escape from debt. We recognise that it is impossible to reach by loans of public money the lowest strata of agricultural society; some security at least must be required. But we are of opinion that more may be done by a development of joint personal security. One of the three great objects of Act XII of 1884 was to "provide for loans being made to village communities or other associated agriculturists," and to the principle of joint responsibility we look for a large extension of these loans. We have already noted that this principle was applied with great success in the Central Provinces during the recent famine, and it is not, we think, too much to hope that a system which was so far successful on one occasion may be generally utilized to extend the beneficent range of these advances to deserving but poverty-stricken cultivators. Before this can be done, however, there must be a revision of such existing rules as lay stress on the need for the security of real property and the desirability of limiting the advances, that can be made, to those whose rights in their holdings can be brought to summary sale—an instance, surely, of the manner in which the object of the rules is lost sight of in their application. It is scarcely necessary to remark that the reasons for reducing the rate of interest are particularly cogent in the case of loans under this Act.

324. We believe that, if our recommendations on both these Acts are adopted, one step will have been taken towards the solution of a great problem. In the debate on Act XIX of 1883 it was remarked that "the Northern India Taqávi Act requires for its application in each case but little preliminary enquiry," and the need for enquiry decreases as the system of records improves. Some help may be obtained from non-official agency, and some of the stiffness and the slowness of the present machinery may be removed. Hard and fast rules limiting the discretion of Collectors, as to the classes to be relieved and as to the extent of the relief, are inconsistent with the policy that we advocate. It is a good rule, and has worked well in practice, to authorize Deputy Commissioners, and Assistant or Extra Assistant Commissioners, to distribute agricultural loans on tour after enquiry on the spot. We strongly recommend the adoption of this rule, wherever it is not at present in force. It is peculiarly suited to advances on a joint bond, which it is also calculated generally to popularize. And it is to the principles of the joint bond and personal security that we look in the future for the greatest benefit from these loans.

SECTION VI.—*Indebtedness in the Bombay Presidency.*

325. Our instructions permit us to record "any recommendations or opinions which it is thought may be of use * in anticipation * of future famines." Nothing can be more useful in anticipation of famine than improvements in the material condition of the cultivators, whereby they may be enabled to withstand the pressure of hard times; and nothing more impedes such improvements than an agrarian system, under which the cultivators fail to reap the full fruits of their industry and are kept

in a state of indebtedness. We fear that the system at present prevailing in Bombay has these unhappy effects, and we therefore consider it desirable to draw attention to the question here.

326. The indebtedness of the Bombay *ryot* has for many years engaged the earnest attention of the Supreme and Provincial Governments. We agree with the analysis of the causes of such indebtedness made by the Deccan Riots Commission; but we desire to call special attention to the agrarian system introduced by the Survey Settlement as an accentuating cause of indebtedness, and more especially to the unrestricted right of the cultivators to transfer their holdings, which the Survey Settlement recognized. A brief exposition of the leading features of this agrarian system is necessary to explain our meaning.

327. The salient features of the system are (a) the creation of a territorial unit of land revenue assessment, which is called "the field"; (b) the assessment of land revenue on each "field" independently, each thus becoming a separate holding; (c) the recognition of the recorded occupant of "the field" as possessing complete proprietary rights over it, subject only to the payment of the revenue or tax assessed on it; and (d) the punctual recovery of the land tax from the recorded occupant in bad years as in good.

328. The system was devised for small cultivators; there was no intention to create large holdings. "There would seem," wrote Captain Wingate, one of the authors of the system, "to be few grounds for anticipating the establishment of wealthy agriculturists cultivating large farms under any circumstances in India. Our measures have to be framed for the class of small farmers who now prevail universally." Accordingly the "field" was designed to contain "the extent of land capable of being cultivated by a pair of bullocks." This was the theory: but the facts of existing holdings and their boundaries were accepted and fitted, as best might be, into the new scheme.

329. The recorded occupier of each "field" under the Survey Settlement became the recognized owner, subject to the payment of a moderate land tax. His rights as owner were, says Captain Wingate "absolutely free from all conditions except the simple one of discharging the Government tax." But this condition was to be rigidly enforced. In the discussions which preceded the adoption of the principles of the "Joint Report," which is the basis of the Bombay Revenue system, the advantages of elasticity in the collection of the land tax did not escape notice.* But, nevertheless, a leading principle of the Revenue System, as finally established, was that, in view of the moderation of the assessment, sufficient elasticity was given by making the assessment of each "field" separate, and by giving the registered occupant complete power of transfer or relinquishment over his "field."

330. A strong tenure of this sort held at a low assessment was a very valuable property; and it is easy to see now that it would have been wise to have kept a vigilant watch over the use which an ignorant and unthrifty peasantry was making of it. But the authors of the system

* The advantages of elasticity in collecting the land revenue were well recognized in the pre-settlement period as appears from the evidence (question 2120—2) given before the Select Committee of the House of Commons in 1832 by Lieutenant-Colonel Sykes, Statistical Reporter to the Bombay Government.

held that the best way "to excite the cultivator to independence and to create agricultural capital" was "to exempt him as much as possible from the pupillage to, and surveillance of, Government officers." There was, it was said, "an obvious advantage to get land out of the hands of the cultivators unable to pay their way and to transfer it to cultivators with more capital. * * * As the customs and native revenue systems of India are adverse to land transfers, it is therefore all the more necessary to adopt measures for giving them effect." Accordingly it was decided that there should be no interference by Government officers with the people, and that no enquiries should be made regarding the financial condition of the cultivators.

331. Thus things were left to take their own course; and the result was—as invariably happens when an ignorant and improvident peasantry can dispose without restriction of valuable rights in land—that the cultivators sank deeper into debt, and that their property began to pass out of their hands. It must be admitted that the conditions on which, under the Revenue System, the cultivators held their lands helped to bring this result about. The rigidity of the revenue system forced them into debt, while the valuable property which they held made it easy to borrow.

332. This is the state of things to-day, and while it remains unaltered, indebtedness in the Bombay Presidency must continue and increase.

333. We desire to guard ourselves against the supposition that we impute want of care or solicitude for the people's interest to the authors of the Bombay revenue system. The authors of that system were men of ability, humanity and zeal for the public good: and nothing is further from our thoughts than to impugn the excellence of their intentions. What we wish to point out is that their intentions have not been fulfilled. They expected the accumulation of agricultural capital; but their plans did not promote thrift, nor did they conduce to the independence of the *ryot*. They looked for the capitalist cultivator; and we find the *saukár's* serf.

334. On the extent of the indebtedness of the Bombay cultivators no precise official information, we believe, exists, but there are materials for a probable estimate. We know that the Deccan Riots Commission of 1876 found that "about one-third of the occupants of Government land are embarrassed with debt; that their debts average about 18 times their assessment; and that nearly two-thirds of the debt is secured by mortgage of the land." We also know that the money-lenders, in the villages visited by the Commission, paid about one-eighth of the whole land revenue—their property having been acquired within the preceding twenty, and for the most part the preceding ten, years—while it was notorious that the private transfers of land were, in most cases, not recorded. The Commission of 1891 found that, within the preceding eight years, land paying 10 per cent. of the revenue, in the districts which they visited, had been sold, two-fifths going to money-lenders; while lands paying $17\frac{1}{2}$ per cent. of the revenue had been mortgaged, four-sevenths going to the *saukárs*. In his evidence before us the Chief Secretary to the Bombay Government said that 28 per cent. of the land in Broach had passed into the possession of the money-lending classes; and from a report of the Collector of Ahmedabad it appears that in his district expropriation of

the old owners has also made considerable way. Taking all these statements into account, and comparing them with the evidence we have recorded, we think it probable that at least one-fourth of the cultivators in the Bombay Presidency have lost possession of their lands; that less than a fifth are free from debt; and that the remainder are indebted to a greater or less extent.

335. It is unnecessary to retrace here the efforts which since 1875 have been made to remedy this lamentable state of things. Commissions have sat and reported; Acts of the Legislature have been passed and amended; executive action of various sorts has been taken. But, of all, the result has been disappointment. Comparing the statistics of sales and mortgages in the four districts to which the Relief Acts have applied with the corresponding figures in non-Act districts, and weighing the evidence of the witnesses on the point, we form the conclusion that these Acts have done but little substantial good. Indeed, there is positively room for holding—and statistics show—that transfers of property, both by sale and mortgage, have become more frequent in districts to which the Relief Acts apply. We therefore think that the time for palliative measures has passed, and that the hour has come for recognizing facts as they exist, and for applying those measures which the facts demand, no matter how unwelcome may be the disillusionment that they may bring.

336. The cultivators, whose names are recorded, may, for the purpose in hand, be divided into three classes : (1) those who have completely lost their lands; (2) those who have only mortgaged their rights; and (3) those who are free from debt. We are only concerned with the first and second classes.

337. It is a curious, but common, practice in Bombay for the money-lender owner to maintain the name of a cultivator of the first class on the village proprietary register and to keep his own name off it. The motive for such action is suggested in paragraphs 70 and 77 of the Report of the Deccan Riots Commission, which also incidentally explain why such a large portion of the land revenue in the Bombay Presidency is paid by money-lenders :—

Instances of the redemption of mortgage are almost unknown; a mortgage is equivalent to a transfer of the *ryot's* title, his interest in the mortgaged land, where, as is usual, he remains upon it as cultivating for the mortgagee, being that of a tenant at a rack rent. * * The *ryot's* land is often more valuable as security to the *saukár* than it is as an ordinary investment to a purchaser; for, through the great reluctance of the *ryot* to sever all connection with his land, the *saukár* is able to exact more than the ordinary rent, and, besides, the land is not the only security which the *saukár* holds; the law gives him command not only over the debtor's movable property, but over his labour and the labour of his family.

338. Now, we urge that the maintenance of the old owner's name on the register has inconvenient results in many directions. The first of these is that the register is not a record of actual facts as it should be; and from this it follows that the demand for the land revenue is made upon a person who is not actually responsible for the payment of it; that an opportunity is, thus, given for the exercise by untrustworthy subordinate officials of powers which are susceptible of great abuse; that the capitalist owner is exempted from directly bearing those responsibilities which the possession of property should impose; and that the Government is prevented from protecting the actual cultivator, *i.e.*, the expropriated owner, by a Tenancy Law. Moreover, there is reason for believ-

ing that the refusal to recognize actual facts in this connection has positively contributed to the people's indebtedness. It is in evidence that the *márwári* or alien class of money-lender, the most exacting of all, does not care to stand forth as owner and cultivate the land. Had money-lenders of this class been compelled to record their names, had the duties of proprietorship been enforced against them, and had their sub-tenants been protected against excessive rack-renting, these money-lenders would probably have concluded that land was a less desirable investment than it has been and is.

339. Two ways of dealing with this first class of cases suggest themselves, for we put aside as Utopian the repurchase of the old holdings by the State. One is to reinstate the old owners by coming to a composition with the *de facto* owners and by arranging for the payment of the latter's claims by instalments. This method would, we gather, be acceptable to Bombay opinion, and, if a practicable means of enforcing it can be devised, it would no doubt be in every way desirable. But we fear that, at best, it holds out but a slender hope of success. There are no possible means by which the *de facto* owners can be compelled to part with their property : while even a liquidation based on consent could hardly be effected within any measurable period of time.

340. Failing such a scheme, one practicable method of dealing with this class of cases seems to us to be to recognize the facts, to record the money-lenders for what they are, *viz.*, the owners of the land which has passed away from the tenants and to protect the latter from rack-renting by a suitable Tenancy Act. There is universal agreement that the expropriated owner has, as a rule, sunk to the condition of a mere serf, tilling the land and making over the produce to the owner. In good years he has nothing to hope for except a bare subsistence; in bad years, like last year, he falls back on public charity.

341. In regard to the cultivators of the second class who are as yet the owners of their holdings, and in respect of whom the money-lender is still merely a mortgagee, the situation is different. The problem is how to preserve to the *ryots* their rights in their holdings, which are fast slipping from their grasp. Here the remedial measures called for are of a legislative as well as of an executive character. The executive measures are the introduction of elasticity in the collection of the Government demand, and its corollary, the improvement in the system of land records. The legislative measures are concerned, first, with enabling the tenantry to compound for their existing debts, and, next with limiting their power of incurring fresh debts or, in other words imposing limitations on the transfer of their property in the future. We will deal with the legislative remedies first and then express our views upon the administrative question.

342. We propose the following legislative measures, and we note that the probability of lasting success will be greatly strengthened if Mutual Credit Associations take root and flourish in the country. In the first place, power should be given by statute for the following or some similar procedure :—

- (1) The account between debtor and creditor should be investigated, and a fair sum should be fixed, to be paid by the former to the latter in liquidation of the debt.

- (2) The average produce of the holding should be ascertained, and its money value should be expressed in cash.
- (3) The surplus produce, after providing for the subsistence of the cultivator and his family and the necessities of cultivation, should be appropriated to the payment of debt, provided that such appropriation shall not be continued after the lapse of a term of years.
- (4) In substitution for (1), (2) and (3) the holding should be made over, at the land tax assessed, to the creditor in usufructuary mortgage for a term of years.

In either case the holding should be declared free of debt at the end of the term. We have ascertained that a procedure similar to this is followed in Rajputana.

343. In the second place, we think that legislation with the object of restricting the transferability of land* should be undertaken in Bombay, and we might refer to the legislation lately carried through in the Punjab, as indicating how this object can be effected. Otherwise we fear that, as the Commissioner of the Central Division said in 1882, "the number of non-cultivating occupants will continue to largely increase, and our moderate survey rates, which are intended to benefit the cultivators, will only benefit land speculators, who will, as occupants, pay the low rates to Government and grind down their sub-tenants under a hideous system of rack-renting."

344. Coming next to the executive measures, we need not again refer to the question of elasticity in the collection of the land revenue, but a few words are necessary as to improvements in the Land Records system which are essential to the proper introduction of it. These improvements consist chiefly in the better organization of the Land Records staff; in the mapping and registration of every plot contained in the "field"; in the maintenance of a correct map by the village accountant; and in the due registration in the village records of all particulars regarding ownership, encumbrances and cultivating rights.

345. We were unfavourably impressed by the insufficient control, which, under the Bombay system, is exercised over the village accountant, and with the waste of strength involved in employing one set of officials in dealing with the land revenue and a different set in dealing with agricultural statistics. The experience of other provinces shows that both functions are best and most economically discharged by one properly graded staff of village accountants, circle superintendents (or *kanungos*) and district superintendents (supervisor *kanungos*), working under the Collector. It is only by consolidating the two staffs in this way that the necessary control can be established over the village accountant.

346. Above all, there should be a real record of all proprietary rights in land, and to this end registration of title in the village register should be enforced. At present there is no precise information as to the actual ownership of the land, and the entries in the village papers are often at variance with the facts. The result is that, when the revenue falls due, and the actual cultivator, who is not the owner, protests that he is not

* Mr. Nicholson is unable to join in the suggestion made in this paragraph, as he is unwilling definitively to pronounce on the advisability of restricting transfers of land.

responsible, the local officials are reduced to a shrewd guess as to who the responsible party may be. This throws an enormous power into the hands of the village accountant, a subordinate official, who, in every province, requires to be kept under strict control.

347. We advise that no time be lost in giving effect to the reforms which we have suggested above.

SECTION VII.—*Agricultural Development.*

348. The last topic in connection with protective policy, on which we desire to remark, is Agricultural Development; and under this head we include irrigation, and the expansion of the Provincial Agricultural Departments, as well as improvement in agricultural processes.

349. The aspects of the famine problem, which, in the opinion of the Commission of 1880, called most urgently for attention, were the ascertainment of the actual facts regarding the agriculture of the country, and the circulation of the surplus stocks of food. To this end the policy of protective railways and of Agricultural Departments was recommended; and this policy has now, by the mere process of achievement, ceased to respond to the requirements of the present time.

350. To the policy of protective railways such ample effect has now been given that the final horror of famine—an actual dearth of food—need no longer be a source of apprehension. In inaccessible mountain country or in some remote valley the local officers may have upon occasion to bring food for the people, or to subsidize private trade to do so; but in the continent at large there is, for the future, no anxiety as to the ability of private trade to deliver food where it is needed. There is, indeed, necessity, as we have already pointed out, for improving the means of transport by an increase of the rolling stock; but generally railway construction has, in our opinion, played its part in the policy of famine insurance. To put the food supply of the country in circulation was necessarily the first object of a wise famine policy; to protect and develop the supply itself should be its second object; and this is the function of agricultural development generally, and of irrigation in particular.

351. This subject was dealt with at considerable length by the Famine Commission of 1898; and the evidence which we have taken and our own experience, show that there is a wide field for the construction of irrigation works. All provinces do not, indeed, present practicable schemes for the construction of great canals; but the possibilities of smaller protective works have in no province been exhausted, while in some provinces they have as yet hardly been examined. For storage tanks, reservoirs and, above all, irrigation wells the scope and the necessity are very great. As the whole subject of irrigation has now been taken up by the Government of India in pursuance of the recommendations of the Commission of 1898, we need do no more than point to the confirmation which our enquiries afford to the conclusions of the last Commission, and express our cordial approval of a new departure in famine policy which would place irrigation works in the place that protective railways have hitherto occupied in the famine insurance programme. We have already made recommendations which, we hope, will greatly stimulate private enterprise to work for this important end.

352. The recommendations of the Commission of 1880, touching Agricultural Departments, were promptly accepted by the Government of India, and carried out so far as lay with them. Undoubtedly much progress has been made in the last twenty years, but the progress has been unequal, and the time has, in our opinion, now come for a further advance. These Agricultural Departments have a double function to discharge, and this is expressed in their designation as Departments of Land Records and Agriculture. They have on the Land Records side to register all facts connected with the tenure of land, with questions of rent and revenue and with agricultural statistics. On the Agricultural side they have to deal with the condition of the cultivating classes, with agriculture and with agricultural methods and the various questions connected with their efficiency.

353. We are, indeed, far from thinking that the Indian cultivator is ignorant of agriculture; in the mere practice of cultivation Agricultural Departments have probably much to learn from the cultivator. But in the utilization of his hereditary skill, in economy of the means of production, and in the practice of organized self-help the Indian cultivator is generally ignorant and backward. It is in correcting these deficiencies that Agricultural Departments will find their richest fields of labour. Without pretending to exhaust the number of subjects on which these departments may usefully employ themselves, we may mention the following: improved agricultural teaching to the better classes; the promotion of Mutual Associations; agricultural research and experiments; enquiries regarding tillage and manure; the investigation of crop diseases and their remedies; the provision of improved seed; the experimental introduction of new staples; the improvement of cattle breeding; the investigation of cattle diseases; and the development of the fodder supply. To some of these subjects more or less attention has, we know, been already given, but they all claim greater and more systematic attention. To this end the employment of a stronger expert staff in every province is necessary. The steady application to agricultural problems of expert research is the crying necessity of the time.

CONCLUSION.

354. These hopes for the future are the seal of the past. In our opinion their complete and lasting fruition depends no less on success in evolving the spirit of self-help and thrift among the people than on securing their crops from drought. For security of the harvest only postpones the pressure of the population on the soil; it is prudence and knowledge and the practice of thrift alone which will relieve it. But pending the effective growth of these qualities there will, we believe, be great protection for the people in the adoption of the recommendations which we have now made. They are the outcome of a careful study of past experience and of the incidents of the last famine. Like other famines it had its successes and its failures, which convey lessons of encouragement and warning. But through all one fact stands out very clearly—that almost every responsible officer did his best. There has rarely been so great a call on the officers of Government, European and

Native, for devotion in the service of humanity; and there has never been a readier response to the call.

A. P. MACDONNELL.

F. A. NICHOLSON.

J. A. BOURDILLON.

SYAM SUNDAR LAL.

May 8th, 1901.



सत्यमेव जयते

APPENDICES.

General Statement of Government Relief in the Central Provinces.

DISTRICT.	Population.	AGGREGATE NUMBER OF PERSONS RELIEVED BY WAGES IN RETURN FOR WORK DONE.				EXPENDITURE FOR WORK DONE.			Incidence of total expenditure for work done per person relieved.	AGGREGATE NUMBER OF PERSONS RELIEVED GRATUITOUSLY.				Total expenditure on gratuitous relief.	Incidence of total expenditure on gratuitous relief per person relieved.
		Men.	Women.	Children	Total.	Wages.	Other expenditure.	Total.		Men.	Women.	Child-ren.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sangor	592,000	1,207,823	187,835	2,362,013	3,757,671	2,66,863	1,60,410	4,27,273	a p. 1 9	1,933,395	3,038,183	5,268,770	10,240,348	6,39,870	0 11
Damoh	325,000	180,938	271,407	75,892	527,737	34,285	18,360	52,745	1 7	951,596	1,189,495	2,378,991	4,520,082	2,81,506	1 0
Jubbulpore	748,000	2,004,951	3,341,584	668,317	6,046,852	3,52,064	1,49,890	5,01,414	1 4	948,877	1,897,775	4,751,838	7,598,500	3,31,285	0 8
Mandla	339,000	394,034	656,722	131,344	1,182,100	52,067	30,950	83,017	1 1	328,061	656,122	2,932,544	3,936,727	2,71,159	1 2
Soni	371,000	1,502,987	2,170,981	500,996	4,174,964	3,06,482	1,15,938	4,22,420	1 7	48,478	678,689	4,023,659	4,750,826	2,28,392	0 9
Narsinghpur	367,000	115,053	172,579	97,527	385,159	24,580	50,156	74,736	3 0	198,233	330,471	594,851	1,123,605	63,573	0 10
Hoshangabad	499,000	3,610,066	5,415,100	1,805,034	10,830,200	8,24,910	4,93,822	13,18,732	1 11	2,137,520	2,810,926	5,350,054	10,267,600	6,16,814	0 11
Nimar	286,000	2,799,499	312,850	4,402,707	7,575,116	6,97,924	4,32,170	11,30,094	2 5	1,755,391	3,104,014	6,526,199	11,385,604	6,65,573	0 11
Betul	323,000	6,491,246	8,519,760	3,651,327	18,662,333	17,80,411	5,36,734	23,17,145	1 11	2,631,012	3,958,518	11,885,560	18,483,090	10,38,112	0 10
Chhindwara	407,000	3,650,859	4,673,099	1,314,320	9,638,278	7,76,082	3,11,511	10,87,593	1 9	1,400,447	1,260,726	5,183,171	7,844,741	4,62,405	0 11
Wardha	400,000	3,853,702	4,957,332	1,377,038	10,190,072	8,15,065	5,07,338	13,22,403	2 0	2,094,297	2,792,397	5,584,795	10,471,439	6,47,365	0 11
Nagpur	758,000	4,219,404	4,746,829	2,070,554	11,036,787	10,68,645	3,13,187	13,81,832	1 9	1,496,078	2,493,497	4,737,648	8,727,243	5,20,466	0 11
Chanda	697,000	7,201,403	10,019,344	1,565,543	18,786,290	16,13,140	8,40,254	24,53,394	2 4	5,593,927	8,080,116	15,508,687	29,182,730	19,40,965	1 0
Bhandara	742,000	6,473,856	7,771,028	2,590,344	16,837,228	12,47,771	3,13,912	15,61,683	1 5	3,142,755	5,499,859	9,821,200	18,463,814	10,04,460	0 10
Balaghat	383,000	6,049,694	5,751,239	1,910,430	13,691,433	11,98,777	2,67,000	14,65,777	1 8	2,377,893	5,548,677	13,465,669	21,392,239	11,33,698	0 10
Raipur	1,534,000	18,840,356	51,855,729	14,137,018	84,822,103	58,35,757	19,20,711	77,56,498	1 5	13,950,408	21,922,074	51,422,191	87,294,673	48,46,132	0 10
Bilaspur	1,164,000	12,084,699	1,612,933	18,526,234	32,225,866	23,13,802	9,51,447	32,65,249	1 7	3,386,393	6,572,784	26,124,119	35,983,296	15,50,867	0 8
Samt'alpur	796,000	1,111,935	1,270,783	317,696	2,700,414	2,13,309	1,04,515	3,17,824	1 19	1,563,905	2,234,150	7,372,698	11,170,753	5,21,254	0 9
TOTAL	10,781,000	81,803,505	113,667,184	57,565,894	253,038,583	1,94,21,934	75,17,925	2,69,39,859	1 8	45,817,146	74,067,578	182,952,644	302,837,363	1,67,66,856	0 10

General Statement of Government Relief in Berar.

DISTRICT.	Population.	AGGREGATE NUMBER OF PERSONS RELIEVED BY WAGES IN RETURN FOR WORK DONE.				EXPENDITURE FOR WORK DONE.			Incidence of total expenditure for work done per person relieved.	AGGREGATE NUMBER OF PERSONS RELIEVED GRATUITOUSLY.				Total expenditure on gratuitous relief.	Incidence of total expenditure on gratuitous relief per person relieved.
		Men.	Women.	Children.	Total.	Wages.	Other expenditure.	Total.		Men.	Women.	Children.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Anraoti . . .	655,645	2,234,784	4,369,918	482,006	7,136,708	₹ 8,76,899	₹ 1,10,067	₹ 9,86,966	a p. 2 3	Adults. 1,322,267	...	3,100,975	4,423,242	₹ 2,51,749	a. p. 0 11
Ellichpur { Ellichpur and Darapur Taluqa, Meikhat	268,767	...	...	...	3,625,598	3,64,997	49,143	4,14,140	1 10	...	...	...	2,558,718	1,43,972	0 11
Wun . . .	471,613	456,207	842,834	287,192	1,589,233	2,05,925	15,267	2,21,192	2 3	242,571	454,393	1,011,262	1,708,246	1,25,566	1 2
Akola . . .	574,782	5,334,337	9,413,980	2,329,099	17,07,416	15,79,844	6,60,022	22,39,866	2 1	Adults. 4,074,286	...	908,864	1,428,935	74,397	0 10
Buldana . . .	481,021	7,975,328	13,184,310	3,845,097	25,004,735	20,00,544	10,24,823	30,25,367	1 11	1,821,725	1,916,372	6,161,376	9,919,473	5,80,416	0 11
Basim . . .	385,181	Adults 11,478,460	2,605,449	...	14,083,909	14,60,157	4,28,605	18,88,762	2 2	Adults. 4,095,525	...	6,817,600	10,853,125	7,20,289	1 1
TOTAL	2,897,040	...	...	...	69,831,008	66,50,796	23,08,462	89,59,258	2 1	...	...	...	37,142,005	21,98,964	0 11

General Statement of Government Relief in Bombay.

District.	Population.	AGGREGATE NUMBER OF PERSONS BELIEVED BY WAGES IN RETURN FOR WORK DONE.				EXPENDITURE FOR WORK DONE.			Incidence of total expenditure for work done per person relieved.	AGGREGATE NUMBER OF PERSONS BELIEVED GRATUITOUSLY				Total expenditure on gratuitous relief.	Incidence of total expenditure on gratuitous relief per person relieved.
		Men.	Women.	Children.	Total.	Wages.	Other expenditure.	Total.		Men.	Women.	Children.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ahmedabad	931,712	9,386,041	9,998,212	3,900,190	23,284,443	24,61,732	5,25,793	29,87,531	a. p. 2 0	3,502,912	4,532,893	11,015,837	19,108,642	14,28,897	a. p. 1 2
Kaira	871,589	7,268,387	8,777,188	3,097,554	19,143,139	28,05,895	3,34,168	31,40,063	1 9	3,318,847	3,980,256	7,383,166	14,682,269	17,29,713	1 1
Panch Mahals	313,417	3,844,001	4,198,663	1,419,474	9,462,138	28,05,895	3,34,168	31,40,063	1 9	2,019,416	2,705,990	4,773,279	9,493,685		1 1
Broach	311,490	7,799,771	8,910,461	3,030,202	19,740,434	23,28,123	5,28,606	28,56,729	2 1	3,097,654	3,418,863	5,924,898	12,441,415	9,97,317	1 3
Surat	649,989	961,462	892,416	207,312	2,061,220	23,28,123	5,28,606	28,56,729	2 1	824,173	1,083,094	1,447,971	3,360,238	1,98,525	0 11
Thana	819,580	312,284	394,310	146,475	853,069	75,355	30,108	1,05,463	2 0	99,743	179,942	231,305	500,990	26,373	0 10
Khandesh	1,460,851	15,103,011	20,413,386	12,324,508	47,840,905	39,13,102	8,31,308	47,44,410	1 7	3,10,740	5,287,324	14,596,316	22,930,380	17,33,156	1 2
Nasik	843,582	6,516,832	9,425,745	2,861,243	18,803,820	18,46,764	5,60,253	24,07,017	2 0	897,624	1,073,288	5,764,815	7,734,727	4,01,239	0 10
Ahmednagar	888,755	15,250,872	22,214,031	8,423,786	45,888,689	43,66,317	10,47,458	54,13,805	1 10	3,773,112	4,351,263	10,474,730	18,599,105	13,14,266	1 1
Poona	1,067,800	4,767,511	6,616,113	2,827,923	14,211,547	12,44,343	4,21,967	16,66,315	1 10	2,850,862	1,802,332	4,041,891	8,695,085	5,99,579	1 1
Sholapur	750,689	10,482,962	14,112,266	6,682,193	31,277,421	27,20,672	4,58,379	31,79,051	1 7	2,813,737	3,042,032	10,510,311	16,366,070	9,69,715	0 11
Satara	1,225,989	3,067,673	3,811,129	1,635,123	8,513,925	6,41,871	1,21,771	7,63,642	1 5	831,320	903,700	1,662,115	3,397,135	2,71,552	1 3
Pijapur	796,339	967,981	1,412,852	644,272	3,045,105	2,68,760	75,473	3,43,233	1 9	518,357	228,214	768,145	1,514,716	1,01,149	1 0
Belgaum	1,013,261	176,974	237,463	119,854	534,296	24,502	21,564	46,066	1 4	65,863	61,411	65,282	192,556	16,069	1 4
Thar and Parkar	298,203	377,570	296,799	215,675	890,044	90,839	7,603	98,442	1 9	126,931	147,126	282,702	556,759	35,078	1 0
TOTAL	12,263,246	86,283,362	111,711,039	47,555,814	245,550,215	2,27,86,280	49,64,487	2,77,50,767	1 9	27,654,281	32,851,728	78,932,763	139,638,772	58,25,698	1 0

General Statement of Government Relief in Ajmer and the Punjab.

DISTRICT.	Population.	AGGREGATE NUMBER OF PERSONS RELIEVED BY WAGES IN RETURN FOR WORK DONE.				EXPENDITURE FOR WORK DONE.			Incidence of total expenditure for work done per person relieved.	AGGREGATE NUMBER OF PERSONS BELIEVED GRATUITOUSLY.				Total expenditure on gratuitous relief.	Incidence of total expenditure on gratuitous relief per person relieved.
		Men.	Women.	Children.	Total.	Wages.	Other expenditure.	Total.		Men.	Women.	Children.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ajmer . . .	542,358	Cannot be given.				₹ 22,58,484	₹ 15,046	₹ 28,73,530	a. p. 1 9·3	Cannot be given.				₹ 6,42,166	a. p. 0 10·1

114

The Punjab.	Population.	AGGREGATE NUMBER OF PERSONS RELIEVED BY WAGES IN RETURN FOR WORK DONE.				EXPENDITURE FOR WORK DONE.			Incidence of total expenditure for work done per person relieved.	AGGREGATE NUMBER OF PERSONS BELIEVED GRATUITOUSLY.				Total expenditure on gratuitous relief.	Incidence of total expenditure on gratuitous relief per person relieved.
		Men.	Women.	Children.	Total.	Wages.	Other expenditure.	Total.		Men.	Women.	Children.	Total.		
Hissar . . .	776,006	16,550,085	2,053,149	18,603,214	18,603,214	₹ 18,17,706	₹ 18,17,706	₹ 18,17,706	a. p. 1 6·8	1,488,213	12,822,265	14,310,478	14,310,478	₹ 7,32,677	a. p. 0 9·8
Rohtak . . .	590,475	6,577,074	941,269	7,518,343	7,518,343	₹ 6,92,413	₹ 6,92,413	₹ 6,92,413	1 5·7	107,841	1,415,212	1,523,053	1,523,053	₹ 59,652	0 7·5
Gurgaon . . .	688,929	2,636,361	167,321	2,803,682	2,803,682	₹ 3,21,964	₹ 3,21,964	₹ 3,21,964	1 10	112,891	954,322	1,067,213	1,067,213	₹ 59,095	0 10·6
Delhi . . .	688,689	413,917	49,014	462,931	462,931	₹ 84,669	₹ 84,669	₹ 84,669	2 10·	17,771	148,304	166,075	166,075	₹ 5,904	0 6·8
Karnal . . .	688,718	1,803,276	356,629	2,165,905	2,165,905	₹ 2,25,842	₹ 2,25,842	₹ 2,25,842	1 8	58,996	642,404	701,400	701,400	₹ 38,347	0 10·5
TOTAL PUNJAB . . .	3,357,817	27,986,693	3,567,882	31,554,075	31,554,075	₹ 31,42,594	₹ 31,42,594	₹ 31,42,594	1 7·1	1,785,712	15,982,507	17,768,219	17,768,219	₹ 8,95,675	0 9·7

INDEX.

Subject.			Page.	Paragraph.
ABORIGINAL TRIBES ...	...	Recommendations regarding — ..	53	162
ACCOUNTS AND AUDIT	...	Importance of a simple and uniform system of — ...	13	36
" "	...	Special staff and travelling auditors necessary ...	ib.	ib.
" "	...	Prompt submission of accounts on works, the duty of the Special Civil Officer ...	27	72
" "	...	Reform required to secure punctuality in the payment of Hospital Assistants ...	53	177
ADMINISTRATION ...	...	Slow development of the principles of famine relief administration ...	1 and 2	1 to 7
"	...	Difficulties of — in recent famine ...	4	15
"	...	Importance of personal equation in — ...	ib.	16
"	...	Importance of personal equation in — ...	5	18
ADVANCES (IN ORDINARY TIMES) ...	...	Under the Agriculturists Loans Act—		
	...	Failure to reach the cultivators most in need of them ...	101	323
	...	Extension of the joint bond and personal security necessary ...	102	323, 324
	...	Procedure to be simplified and advances given on the spot ...	ib.	324
" " "	...	Under the Land Improvement Loans Act (<i>vide</i> Land Improvement)		
ADVANCES (IN FAMINE TIMES) ...	...	Extent of — ...	83	250
" " "	...	Analysis of — in the various provinces ...	83 to 85	251 to 255
" " "	...	The least demoralizing form of relief ...	85	256
" " "	...	Importance of strictness in recovery of — ...	ib.	257
" " "	...	Importance of — at the beginning of a famine ...	15	41
" " "	...	Specially important to stimulate private works ...	12	34
" " "	...	Place of — in the rains policy ...	15	41
" " "	...	Subsistence — in the rains, a form of gratuitous relief ...	22	60
" " "	...	Principle of joint bond ...	83	251
" " "	...	Separation of the processes of selection and payment	48	144
AGRICULTURE ...	...	Need of agricultural training for Circle Inspectors ...	84	253
AGRICULTURAL DEPARTMENTS	...	Progress made by — ...	ib.	251
" "	...	Double functions of — ...	ib.	ib.
" "	...	Need for further advance ...	ib.	ib.
" "	...	Special enquiry as to fodder supply ...	73	219 to 221
" "	...	Functions of — in connection with prevention of famine ...	109	353
" "	...	Expert knowledge, the crying need of the time ...	ib.	ib.

Subject.						Page.	Paragraph.
AGRICULTURAL BANKS	...	...	Need for —	...	...	88	268
						94	288
						95	293
						ib.	294
						96	295
						97	301
							302
						98	310
						99	307
						ib.	305
AIMER	...	...	Large numbers on relief in —	...	...	6	19
"	...	...	Lenient conditions on test works in —	...	...	17	44 (c)
"	...	...	Absence of village works in —	...	...	22	59
"	...	...	Special Civil Offices in —	...	...	26	71
"	...	...	Abandonment of minimum wage in —	...	...	29	77
"	...	...	Absence of daily payment of wages in —	...	...	33	90
"	...	...	Wages in —	...	...	ib.	92
"	...	...	Wages in —	...	...	39	112
"	...	...	Wages in —	...	...	ib.	114
"	...	...	Gratuitous relief in — proper	...	...	44	128
"	...	...	Gratuitous relief in — proper	...	...	45	135
"	...	...	Poor-house in —	...	...	67	199
"	...	...	Poor-house in —	...	...	45	134
"	...	...	Rains policy in —	...	...	47	142
"	...	...	Mortality in —	...	...	66	196
"	...	...	Mortality in —	...	...	67	to 199
"	...	...	Absence of measures to save cattle in —	...	...	69	205
"	...	...	Suspensions and remissions of revenue in —	...	...	82	245
"	...	...	Advances in —	...	...	85	254
"	...	...	Pressure of the land revenue in —	...	...	87	264
ASSISTANT COLLECTORS	...	...	Position of — in regard to public works	...	...	26	70
ASSOCIATIONS FOR MUTUAL CREDIT	...	...	Importance of — for agriculturists	...	...	94	288
						106	342
"	"	"	Importance of — for artisans and others	...	...	98	308
BARODA	...	...	Immigration from —	...	...	53	163
BERAR	...	...	Large numbers on relief in Buldana district	...	...	6	19
"	...	...	Disorganization of the works in the Buldana district	...	...	10	28
"	...	...	Organization of private charity in Akola, Amraoti and Ellichpur districts	...	...	16	42
"	...	...	Village works in —	...	...	22	59
"	...	...	The minimum wage in —	...	...	29	77
"	...	...	Task adjusted to distance travelled in the Ellichpur district	...	...	31	83

Subject.				Page.	Paragraph.
BERAR	...	...	Variation of the task in — ...	32	87
"	...	...	Daily payment of wages in — ...	33	92
"	...	...	Reduced minimum wage in — ...	36	102
"	...	...	Wages in — ...	39	112
"	...	...	Wages in — ...	ib.	114
"	...	...	Rains policy in — ...	49	148
"	...	...	Relief of aboriginal tribes in — ...	52	159
"	...	...	Mortality in — ...	62	186
"	...	...	Mortality of cattle in — ...	69	205
"	...	...	Mortality of cattle in — ...	72	215
"	...	...	Suspensions and remissions of revenue in — ...	79	238
"	...	...	Suspensions and remissions of revenue in — ...	91	276
"	...	...	Advances in — ...	84	252
"	...	...	Pressure of the land revenue in — ...	87	263
BOMBAY	...	...	Large numbers on relief in Gujarat in the rains ...	6	19
"	...	...	Numbers relieved in Ahmednagar and Sholapur swollen by immigration ...	ib.	ib.
"	...	...	Numbers relieved in Ahmednagar and Sholapur swollen by immigration ...	64	189
"	...	...	Numbers relieved in Ahmednagar and Sholapur swollen by immigration ...	ib.	190
"	...	...	The possibility of famine in Gujarat not foreseen ...	9	24
"	...	...	Need for greater control over village accountant and circle inspector in — ...	ib.	26
"	...	...	Mortality statistics in — not sent to the Collector ...	ib.	ib.
"	...	...	Difficulties in — caused by want of establishment	10	28
"	...	...	Employment of schoolmasters and educated men in Gujarat ...	11	ib.
"	...	...	Want of appreciation by its officers of the policy of the — Government ...	12	31
"	...	...	Tours of the Chief Secretary in — ...	13	35
"	...	...	Private charity organized in Surat ...	16	42
"	...	...	Private charity organized in Surat ...	17	44 (b)
"	...	...	Prolongation of the test stage in — ...	ib.	44 (c)
"	...	...	Prolongation of the test stage in — ...	19	49
"	...	...	Flocking of women and children to test works in the Deccan ...	18	44 (f)
"	...	...	Omission to open poor-houses early in the Khandesh District ...	ib.	47
"	...	...	Restricted use of village works in — ...	22	59
"	...	...	Want of a reserve of village works in Gujarat ...	ib.	58
"	...	...	Want of a reserve of village works in Gujarat ...	65	195
"	...	...	Small number of works in the Kaira and Panch Mahals districts ...	23	62
"	...	...	Action taken to reduce the popularity of the works in the Broach district ...	ib.	63
"	...	...	Action taken to reduce the popularity of the works in the Broach district ...	24	64
"	...	...	Independence of the Public Works Department as to tasks in — ...	26	68

Subject.						Page.	Paragraph.
BOMBAY	...	...	...	Special Civil Officers in —	...	26	71
"	...	...	...	Absence of charge system in —	...	27	73
"	...	...	...	The minimum wage in —	...	29	77
"	...	...	...	Tasks in —	...	ib.	78
"	...	...	...	Treatment of new-comers in —	...	31	82
"	...	...	...	Absence of daily payment of wages in —	...	33	89
"	...	...	...	Margin in measurements in —	...	ib.	90
"	...	...	...	The wage standard in Gujarat	...	ib.	92
"	...	...	...	Reduced minimum wage in the Deccan	...	34	93
"	...	...	...	Wages in —	...	36	101
"	...	...	...	Gratuitous relief in —	...	ib.	102
"	...	...	...	Resolution of the Government of — in regard to poor-houses	...	39	110
"	...	...	...	Assistance of missionaries in the management of poor-houses in Gujarat	...	ib.	112
"	...	...	...	Attitude in — towards non-official agency	...	ib.	114
"	...	...	...	Rains policy in —	...	19	51
"	...	...	...	Relief of aboriginal tribes in the Panch Mahals and Khandesh	...	44	128
"	...	...	...	Position of District Medical Officer in —	...	45	135
"	...	...	...	Difficulties regarding hospital assistants in —	...	46	137
"	...	...	...	Mortality in —	...	ib.	140
"	...	...	...	Mortality of cattle in —	...	49	149
"	...	...	...	Effect of fodder famine in Gujarat	...	50	151
"	...	...	...		...	65	195
"	...	...	...		...	45	134
"	...	...	...		...	46	136
"	...	...	...		...	49, 50	150
"	...	...	...		...	52	161
"	...	...	...		...	56	171
"	...	...	...		...	57	172
"	...	...	...		...	58	177
"	...	...	...		...	63 to 65	187 to 195
"	...	...	...		...	69	205
"	...	...	...		...	70	207
"	...	...	...		...	72	215
"	...	...	...		...	69	205

Subject.				Page.	Paragraph.
BOMBAY	Measures taken to save cattle in —			70	210
				71	211
				ib.	212
				ib.	213
				72	215
				ib.	216
"	Attitude of the — Government towards the relief of weavers			75	226
				80, 81	240 to 244
"	Suspensions and remissions of revenue in —			91	275
				92	279
"	Advances in —			84	253
"	Pressure of the land revenue in —			88	265 to 268
"	Sub-soil water-rate in Gujarat			101	320
"	Indebtedness in —			102 to 108	325 to 347
CARRIERS	Task of — { ordinarily when digging			31	83
				32	86
"	Wage of —			39	112
					113
CATTLE	Mortality of —			69	205
"	Measures to prevent mortality of —			70	209
"	Importance of keeping — in the villages			72	214
"	Dangers of State deportation of —			ib.	215
"	Private — camps			73	218
"	Migration of — from Native States might be assisted			56	170
CENSUS	Death-rates calculated on the — of 1891			60	183
"	Bearing of — figures 1901 on the mortality			69	footnote. 204
CENTRAL PROVINCES	Large numbers on relief, particularly in the Betul and Raipur districts			5	17
				ib.	18
	Attitude of the people in the — as described by the Chief Commissioner in February 1900			7	21
	Disorganization on the works in the Chhattisgarh Division			10	28
	Issue of circulars in August 1899			12	31
	Acting in advance of disclosed pressure			ib.	33
	Omission to use test works in the —			16	43
	Poor-houses little used in the —			18	46
	Village works in the — particularly in the Chhattisgarh Division			22	59
	Mr. Fuller's system of selection in the Jubbulpore Division			25	66
	Independence of the Public Works Department as to tasks in —			26	68
	Special Civil Officers in —			ib.	71

Subject.				Page.	Paragraph.
CENTRAL PROVINCES ...	...	Minimum wage used only for weakly gangs in the —		29	77 (<i>vide</i> 78)
"	...	Tasks in the — ...		31	82
"	...	"		<i>ib.</i>	83
"	...	"		36	100
"	...	"		39	110
"	...	"		<i>ib.</i>	111
"	...	Wages in the — ...		<i>ib.</i>	112
"	...	"		<i>ib.</i>	114
"	...	"		40	116
"	...	"		41	118
"	...	Age limits of working children in the —		38	108
"	...	"		19	51
"	...	"		43	126
"	...	"		44	128
"	...	"		46	137
"	...	Gratuitous relief in the — ...		<i>ib.</i>	138
"	...	"		47	141
"	...	"		48	145
"	...	"		<i>ib.</i>	146
"	...	"		<i>ib.</i>	147
"	...	"		<i>ib.</i>	145
"	...	Rains policy in the — ...		<i>ib.</i>	* 146
"	...	"		<i>ib.</i>	147
"	...	"		50	153
"	...	Relief of aboriginal tribes in the —		52	160
"	...	Mortality in the — ...		60	} 1:3 to 1:5
"	...	"		61	
"	...	Mortality of cattle in the —		69	205
"	...	"		70	206
"	...	Effect of railways in the — ...		74	222
"	...	"		76	230
"	...	Weaver relief in the — ...		77	231
"	...	"		79	238
"	...	Suspensions and remissions of revenue in the —		90	272
"	...	"		83	251
"	...	Advances in the — ...		85	256
"	...	"		87	261
"	...	"			262
CHARGES ON WORKS ...	...	Importance of having compact —		27	73
"	"	Establishment for —		28	74
"	"	Skeleton — to be in reserve		<i>ib.</i>	75
"	"	Officer in charge should ordinarily be the special Civil Officer		27	72
CHARITABLE RELIEF FUND	...	Beneficent work of —		51	154

			Subject.	Page.	Paragraph.
CIRCLES ...	...	...	Early organization of relief — necessary ...	15	41
" ...	...	...	Sub-division of — ...	19	50
CIRCLE INSPECTORS (FAMINE) ...	...	...	Responsible men required. Ministerial officers accustomed to sedentary work rarely successful ...	ib.	ib.
" " (REVENUE) ...	...	...	Need of agricultural training for — ...	9	26
" " " ...	...	...	In Bombay — should be more under the control of the district authorities ...	ib.	ib.
				107	345
CIRCULARS ...	...	...	Explaining policy should be published at the outset of the Famine ...	12	31
				15	40
CLOSURE OF RELIEF ...	...	...	Procedure for — ...	51	155 to 157
COLLECTOR ...	...	...	Supremacy of — in his district ...	26	68
" ...	...	...	Responsibility of — for relief and expenditure ...	ib.	ib.
" ...	...	...	Responsibility of — for conversion of test works into regular relief works ...	19	49
COMMISSION ...	...	...	Previous Commissions ...	1 and 2	2, 3 and 6
" ...	...	...	Principles of the 1880 — ...	2	7
" ...	...	...	Justification of the principles laid down in 1880 ...	ib.	8
" ...	...	...	Attitude of 1898 — towards the principles laid down in 1880 ...	ib.	ib.
				3	9
COMPULSORY RESIDENCE ON RELIEF WORKS.			Not desirable ...	23	62
CONTROL ...	...	...	Of public works ...	25 and 26	67 to 70
" ...	...	...	Absence of — over the Land Records staff in Bombay ...	9	26
				107	346
DAILY PAYMENTS ...	...	...	Necessary on public works ...	33	91
" ...	...	...	Unnecessary on village works ...	ib.	ib.
DANGER SIGNALS ...	...	...	Enumerated and discussed ...	14 and 15	37 to 39
DECCAN RELIEF ACTS ...	...	...	Failure of — ...	105	335
DEMORALIZATION ...	...	...	Danger of — recognized by the Commission of 1880 ...	2	7
" ...	...	...	Realized in the recent famine ...	7	21
" ...	...	...	Lasting effects of — ...	29	78
" ...	...	...	Caused by acting in advance of disclosed pressure ...	12	33
" ...	...	...	" minimum wage ...	29 and 30	78 and 79
" ...	...	...	" deferred payment of wages ...	33	89
" ...	...	...	" laxity in recovery of advances ...	85	257
DEPENDANTS ...	...	...	Relief to — a condition of the New Code System ...	30	80
" ...	...	...	Form of relief to — ...	44	131
" ...	...	...	Dole for adult — ...	40	115
" ...	...	...	Dole for children — ...	ib.	116
" ...	...	...	Return of — to their villages ...	44	131
" ...	...	...	Elimination of — from works ...	ib.	132
" ...	...	...	No relief to — on village works ...	45	133
" ...	...	...	Power to earn more than the full age not to take the place of relief to — ...	42	124

Subject.				Page.	Paragraph.
DIGGERS ...	...	Task of —	ordinarily ...	31	83
			when carrying ...	32	86
" ...	...	Wage of —	...	39	111
DISTANCE TEST ...	...	Undesirable	...	23	62
" ...	...	When legitimate	...	25	66
DISTRICT ENGINEER ...	...	To be the Assistant of the Collector as regards discipline on the works		26	69
DRAFTING ...	...	Dangers of —	...	24	65
" ...	...	When legitimate	...	ib.	64 and 65
EARNINGS ...	...	Inspecting Officers should specially verify —		30	80
EDUCATION ...	...	Importance of popular —		89	269
EDUCATIONAL DEPARTMENT ...	...	Excellent famine officers furnished by —		10	28
ESTABLISHMENT (GENERAL) ...	...	Difficulties caused by want of —		ib.	28
" "	...	District or divisional lists of candidates to be maintained		ib.	ib.
" "	...	Early arrangements to be made for —		15	41
" "	...	Special accounts and audit — required		13	36
" "	...	Complete — for a charge		28	74
" (MEDICAL)	...	Need for early organization of —		15	41
" "	...	Inferiority of temporary —		57	172
" "	...	Inferiority of temporary —		58	178
" "	...	Employment of native practitioners		ib.	178
" "	...	Lists of qualified candidates to be kept up		ib.	177
" "	...	Strong inspecting medical staff required		57	175
EXPENDITURE ...	...	Amount of —		7	22
FAMINE ...	...	Area and population affected		4	14
" ...	...	Historical summary of previous famines		1 and 2.	1 to 6
" ...	...	Peculiarities of the recent —		4	15 and 16
" COMMISSIONER	...	Appointment and functions of —		13	35
" INSURANCE FUND	...	Experiments in storing hay a proper charge against the —		73	219
" " "	...	Expenses in connection with a reserve of rolling stock a proper charge against the —		75	225
" SUPERINTENDENTS	...	Position of — in regard to public works		26	70
FINES ...	...	Disappear under the New Code System		34	93
FODDER ...	...	A — famine		4	15
" ...	...	Growth of — crops		69	205
" ...	...	Growth of — crops		70	210
" ...	...	Importation of —		71	211
" ...	...	Improved baling of grass, and use of oil-cake		ib.	213
" ...	...	The storage of hay and the whole question of fodder-supply to be examined by the Agricultural Department		73	219 to 221
FORESTS ...	...	Deportation of cattle to —		72	215
" ...	...	Restriction of free grazing in —		ib.	216

Subject.			Page.	Paragraph.
GANGS		Size and composition of —	28	75
GRATUITOUS RELIEF (vide CIRCLES).		Self-acting tests impossible; personal selection essential	44	129
" "		Preliminary lists for —	15	41
" "		Early distribution of — desirable	19	51 and 52
" "		Extent of —	43	125
" "		" "	ib.	126
" "		Expenditure on —	7	22
" "		Dangers and difficulties of —	43	127
" "		Reasonable limits for —	44	128
" "		Increase of — necessary in the rains	47	143
" "		Subsistence advances in the rains a form of —	84	253
" "		Closure of — and valedictory dole	51	156
" "		Liberal — necessary for aboriginal tribes	53	162
" "		Should not be given to the able-bodied	19	51
" "		" "	50	153
" "		In fodder famines — may be given to the common herdsmen of the village cattle	72	214
HOSPITAL ASSISTANTS		To be subordinate to the District Engineer	57	174
" "		Number of — required	ib.	172
" "		Duties of —	ib.	173
" "		Professional supervision of — required	57	175
" "		Reform in the payment of — necessary	58	177
" "		Conditions on which — may be relieved of sanitary duties	ib.	178
HOSPITAL AND SANITARY ARRANGEMENTS.		General responsibility of Special Civil Officer for —	27	72
HYDERABAD		Immigration from —	6	19
" "		" "	54	165
IMMIGRATION		Vide Native States.		
INDEBTEDNESS		The land revenue not the cause of — <i>per se</i> ; but need for elasticity in collection to prevent —	88	266
" "		The problem of —	94	288
" "		The remedies for —	89	269
" "		Difficulties in connection with State advances	101	323
" IN BOMBAY		Extent of —	104	334
" "		Analysis of the causes of —	103	326
" "		Agrarian system, an accentuating cause of —	ib.	ib.
" "		Analysis of the agrarian system	103, 104	327 to 333
" "		" "	105	338
" "		Unsuccessful attempts to remedy —	ib.	335
" "		Remedies suggested	106, 107	339 to 346
INSTRUCTIONS		To the Commission	3	11

Subject.				Page.	Paragraph.
INSTRUCTIONS	...	...	Reservations in — to the Commission ...	8	12
				10	27
				21	56
				53	163
INTELLIGENCE	...	...	Improvement since 1880 in the system of —	9	25
				109	352
"	"	"	Further improvements suggested	9	26
INTEREST	...	...	Reduction in the rate of — under the Loans Act required	100	318
				101	323
IRRIGATION	...	...	Should take the place of railways in the policy of famine insurance	108	351
"	"	"	Scope for —	ib.	ib.
"	"	"	Stimulus to well-construction	100	316
"	"	"	Expert staff to be appointed	ib.	ib.
KATHIAWAR	...	...	System of payment by results adopted in —	29	77
KITCHENS	...	...	A feature of the recent famine	46	139
"	"	"	Failure of — as tests	46, 47	139 to 141
"	"	"	Effect of — on public health	47	142
"	"	"	Unsuitable in the rains, and, as a form of relief, importance of — in relieving aboriginal tribes	ib.	ib.
LABOUR-MARKET	...	...	Danger of disturbing the —	37	106
				50	153
			Supplementing the —	48	145
"	"	"		50	153
LAND IMPROVEMENT	...	...	Encouragement of — by banks, &c.	99	309
LAND IMPROVEMENT LOANS ACT			Object of — protective as well as productive	ib.	311
"	"	"	Permanent exemption from assessment of increase of assets due to improvements necessary	99	316
"	"	"		100	313 to
"	"	"		101	321, 322
"	"	"	Terms for repaying loans under — to be more liberal	ib.	319
"	"	"	Permanent charge on the land, an alternative to repayment of capital	ib.	ib.
"	"	"	Remission in case of failure of a well due to causes beyond the borrower's control	100	317
"	"	"	Reduction in rate of interest recommended	ib.	318
LAND REVENUE. PRESSURE OF —			Nature of enquiry concerning — and safeguards adopted	86	260
				88	263
"	"	"	Analysis of —	87	261 to 267
"	"	"		88	
"	"	"	Conclusion regarding —	ib.	268
"	"	"	Assessments under Native Rule	ib.	ib. footnote.
"	"	"	Attitude of Nagpore landowners	87	262
"	"	"	Tendency of the State to take a diminishing share of the assets	ib.	ib.

Subject.				Page.	Paragraph.
LAND REVENUE. SUSPENSIONS AND REMISSIONS OF —	<i>In ordinary times —</i>				
	Need for elasticity	...	...	88	268
	Advance in elasticity, except in Bombay	...	...	89	270
	Elasticity part of the old Bombay system	...	...	103	329
	Existing procedure in the different provinces	...	...	90	footnote, 271
				91	to 277
	Principles to be followed	...	...	91	278
				93	281 to 287
	Need for relief to cultivators	...	...	91	278
	Differential treatment of rich and poor	...	...	82	246
				ib.	247
				91, 92	278 to 280
	Necessary to fix instalments	...	...	93	287
				82	248
	.. <i>In times of famine —</i>	...	...	93	285
				78	285
	Extent of —	...	...	78	237
	Need for early action	...	...	15	41
				78	237
				79	238
	Need for greater liberality than in ordinary times	...	...	81	238
				ib.	242
	Political aspect of —	...	...	ib.	243
	Enquiry into individual cases	...	...	78	236
				79	239
				80	241
Recovery of land revenue suspended less important than recovery of advances	...	...	81	243	
			ib.	244	
			85	257	
LOCAL GOVERNMENTS	Should have discretion within the limits of accepted principle	...	...	8	23
" "	Alone can decide as to the existence of scarcity or famine	...	...	19	48
" "	Should not be fettered in the adjustment of the price basis	...	...	42	123
MADRAS	Use of test works in —	...	...	16	43
" "	Weaver relief in —	...	...	76	230
				77	231
" "	Suspensions and remissions in —	...	...	91	277
MEASUREMENTS	Should be daily on public works	...	...	33	89
				ib.	91
" "	A margin required in —	...	...	34	93
MINIMUM WAGE	The stumbling block of famine administration	...	...	29	76

Subject.				Page.	Paragraph.
MINIMUM WAGE	...	...	The demoralizing effect of —	29	78
"	...	...	Not required	ib.	77
"	...	...	Abolition of — for able-bodied recommended	30	79
"	...	...	Reduced — not a subsistence wage	36	102
MORAL STRATEGY	...	...	Special importance of —	11	30
MORTALITY	...	...	Connection of diseases with famine	59	180
"	...	...	Special causes at work during recent famine	ib.	182
"	...	...	Extent and analysis of — during recent famine	60 to 68	183 to 203
"	...	...	Light thrown by census statistics on —	69	204
"	...	...	Possibilities of error in statistics	59 61 68 ib.	181 184 202 203
"	...	...	Statistics in Bombay should go to the Collector	9	26
NATIVE STATES	...	...	Commission precluded from enquiry concerning relief in —	3 53	12 163
"	"	...	Extent of immigration from —	ib. 54	163 to 166
"	"	...	Effect of immigration from — on mortality in British districts	61 62 63 64 65 67 ib. 68	184 186 188 190 194 198 199 203
"	"	...	Proposals regarding immigration from —	54, 55	167 168
"	"	...	No radical change of policy called for	56	169
NEW CODE SYSTEM	...	...	Definition and conditions of —	30	80
"	"	...	Desirability of daily payments under —	33	88
NEW-COMERS	...	...	Special attention to — necessary, and the duty of the Special Civil Officer	27	72
"	...	...	Prompt admission and light tasking of —, conditions of the New Code System	30	80
"	...	...	Separate small gangs to be made for —, and individuals to be tasked	31	84
"	...	...	Rest-day wage to be given to —, until they are enrolled in a gang	41	118
"	...	...	Hospital Assistant periodically to inspect —	57	173
NON-DEPARTMENTAL WORKS	...	...	Defined	20	54
"	"	...	Need not interfere with private works	83	251

Subject.			Page.	Paragraph.
			16	42
NON-OFFICIAL AGENCY	...	Success of — ...	45	134
			77	231
" "	...	Need for greater use of — ...	12	84
" "	...	Special need in case of —	ib.	ib.
		(a) village works ...	15	41
			20	55
			22	60
		(b) village doles ...	45	136
		(c) poor-houses ...	ib.	134
		(d) relief of artizans at their trades ...	77	231
		(e) orphanages ...	ib.	234
NORTH-WESTERN PROVINCES	...	Temporary character of the warnings of distress in — ...	14	37
" "	...	Use of test-works in — ...	16	43
" "	...	Use of poor-houses in — ...	18	46
" "	...	Rules regarding remissions and suspensions in the — ...	90	271
" "	...	Agricultural banks in the — ...	94	289
			98	306
NURSING MOTHERS	...	Extra wage or dole for — ...	40	117
"	...	Hospital Assistant to look after — ...	57	173
ORDER OF RELIEF MEASURES	...	Difficulties regarding — ...	15	40
" "	...	Standard plan showing — ...	15 to 19	41 to 52
ORGANIZATION ON WORKS	...	Charges establishment ...	27	73
			28	74
				75
ORPHANS	...	Clear statement of policy required regarding — ...	77	232
			ib.	233
"	...	State orphanages ...	ib.	234
"	...	Private ...	78	235
PATIALA	...	Intervention of the Punjab Government ...	54	165
PAYMENT	...	Daily — necessary on public works ...	33	88
			ib.	91
"	...	" " for aboriginal tribes ...	53	162
"	...	" unnecessary on village works ...	33	91
"	...	Evils of deferred — ...	ib.	89
			ib.	90
"	...	How — should be made ...	34	95
"	...	Need for close supervision of —, and responsibility of Special Civil Officer for — ...	ib.	96
			27	72
PENAL WAGE	...	No place for — in the New Code System ...	41	119
PERSONAL EQUATION	...	Importance of — in famine administration generally	5	18
" "	...	" regard to non-official agency ...	12	34

Subject.			Page.	Paragraph.
PERSONAL EQUATION ...	...	Importance of—in relieving aboriginal tribes ...	52	159
			53	162
PLAN OF CAMPAIGN ...	...	Need for early publication of a comprehensive — ...	12	31
” ” ...	...	Standard plan	15	40 <i>et seq.</i>
POLICY ...	...	Of waiting on events necessary ...	12	33
			48	147
POOR-HOUSES ...	...	Importance at early stage and uses of — ...	18	45 to 47
” ...	...	Management of —	45	134
” ...	...	Closure of — and valedictory dole ...	51	156
POPULATION ...	...	Affected by famine	4	14
				16
PREPARATIONS ...	...	Importance of —	9	24
” ...	...	Liberal — economical in the end ...	12	32
PRICES ...	...	Adjustment of — for the wage scale ...	41, 42	121 to 123
PRIVATE CHARITY ...	...	Organization of —	16	42
PRIVATE WORKS ...	...	Defined	20	54
” ...	...	Importance of —, especially at the beginning of a famine	22	60
” ...	...	Programmes of —	10	27
” ...	...	Means of stimulating —	12	34
” ...	...	Need not interfere with other village works ...	83	251
PROGRAMMES ...	...	Question of — reserved for separate enquiry ...	3	12
			10	27
” ...	...	Urgent need for — of public works ...	<i>ib.</i>	<i>ib.</i>
” ...	...	” ” village works ...	<i>ib.</i>	<i>ib.</i>
” ...	...	” ” private works ...	<i>ib.</i>	<i>ib.</i>
” ...	...	” ” works for aboriginal tribes ...	53	162
” ...	...	” ” works in Native States ...	56	170
PUBLIC WORKS ...	...	Defined	20	54
” ...	...	The backbone of relief system as a rule ...	21	57
” ...	...	Utility of — constructed in the recent famine reserved for separate enquiry ...	3	12
			21	56
PUBLIC WORKS DEPARTMENT ...	...	Current projects of — to be embodied in famine programmes ...	10	27
			25	
” ” ...	...	Position of —	26	67 to 70
			27	72
PUNJAB ...	...	Large numbers on relief in the Hissar district ...	6	19
” ...	...	Decline in numbers relieved after the <i>rabi</i> harvest in the —	<i>ib.</i>	20
” ...	...	Absence of village works in the — ..	22	59
			50	152
” ...	...	Drafting to the Jhelum Canal from Hissar ...	24	65

Subject.				Page.	Paragraph.
PUNJAB	...	...	System of selection in the Rohtak district	25	66
"	...	...	Special Civil Officers in the —	26	71
"	...	...	Minimum wage in the Hissar district	29	77
"	...	...	Payment of wages twice a week in the —	ib.	78
"	...	...		33	92
"	...	...		39	111
"	...	...	Wages in the —	ib.	112
"	...	...		ib.	114
"	...	...		40	115
"	...	...		42	124
"	...	...	Relief of dependants in the —	ib.	ib.
"	...	...	Dependants on the works in Hissar	44	131
"	...	...	Rains policy in the —	50	152
"	...	...	Mortality in the —	67	200
"	...	...		68	201
"	...	...		82	246
"	...	...	Suspensions and remissions of revenue in the —	ib.	247
"	...	...		ib.	248
"	...	...		90	273
"	...	...		91	274
"	...	...		92	279
"	...	...	Advances in the —	85	255
RAILWAYS	...	...	The policy of the 1880 Commission regarding — carried out	108	350
"	...	...	Benefits of —	ib.	ib.
"	...	...		74	222
"	...	...	Want of — a cause of failure in previous famines	ib.	ib.
"	...	...	Insufficiency of rolling stock for famine traffic	71	212
"	...	...		74	223
"	...	...	Importance of an increase in rolling stock	75	224
"	...	...		ib.	225
"	...	...	Irrigation should take the place of — in famine insurance	108	351
RAINS POLICY	...	...	Discussed	48	144
"	...	...		50	153
"	...	...	Analysis of — adopted in the different provinces	48 to 50	145 to 152
RÁJPUTÁNA	...	...	Immigration from —	53	163
"	...	...		54	165
REGISTRATION	...	...	Importance of — of land improvements	101	322
RELIEF	...	...	Numbers relieved	4	16
"	...	...		5	17
"	...	...	Steady increase in numbers relieved	6	20

Subject.				Page.	Paragraph.
RELIEF	...	...	The numbers relieved not the only or proper measure of pressure	4	16
"	...	...	Numbers likely to need — according to the estimate of the Commission of 1880	5	17
"	...	...	Large proportion of the population on — in certain districts	ib.	18
"	...	...	Reasonable limits for gratuitous —	6	19
"	...	...	Order of — measures	44	128
"	WORKS	...	Conversion from test works to be ordered by the Collector	15 to 19	41 to 52
"	"	...	Classes of —	19	49
"	"	...	Policy regarding —	20	53
"	"	...	Number of — required ordinarily	ib.	54
"	"	...	" " for aboriginal tribes	22	55 to 58
"	"	...	Control of —	ib.	61
"	"	...	Organization on —	28	62
"	"	...	System on —	53	162
REMISSIONS	...	...	Vide Land Revenue.	25 to 27	67 to 72
REST-DAY	...	...	Necessary	27	73 to 75
"	...	...	Wage for —	28	76 to 81
"	...	...	" required, except in special circumstances.	29 and 30	76 to 81
REVENUE SYSTEM IN BOMBAY	...	...	Vide Indebtedness in Bombay.	41	118
RISK	...	...	Warnings of 1898 Commission against measures involving —	41	118
"	...	...	Necessary to take some —	ib.	ib.
SANITARY	...	...	Hospital Assistant responsible for — arrangements under the Special Civil Officer	80	80
"	...	...	Constitution of — Department	41	118
"	...	...	Position of —	30	80
SELECTION	...	...	Individual — possible on works only in the case of village works	41	118
"	...	...	Individual — essential for gratuitous relief	44	129
SELF-ACTING TESTS	...	...	For public works — essential	46	140
"	"	...	For gratuitous relief — impossible	47	141

Subject.			Page.	Paragraph.
SPECIAL CIVIL OFFICER	...	Position and functions of —	26	71
"	"	The officer in charge of a work to be ordinarily the	27	72
"	"	—	ib.	ib.
"	CLASS OF LABOURERS	Wage for —	39	110
STORAGE	...	Experiments for — of hay recommended	73	219
"	...	Disappearance of the habit of — of grain	74	222
SUB-SOIL WATER RATE IN GUJARAT	...	Objections to the —	101	320
SUSPENSIONS	...	<i>Vide</i> Land Revenue.		
TASK	...	Standard — on public works	31	83
"	...	" " village works	ib.	ib.
"	...	" " test works	17	44
"	...	Individuals to be tasked if possible, if not small sub-gangs	31	84
"	...	New-comers to be individually tasked	ib.	ib.
"	...	Adjustment of — when the numbers of diggers and carriers are disproportionate	32	86
"	...	Elasticity of —, and light — for new-comers, conditions of the New Code System	30	80
"	...	Adjustments of — on a work, the duty of the Special Civil Officer	27	72
"	...	Dangers of a general raising of — if weakly persons have not been separated	24	64
"	...	Variations of — safe and desirable in certain cases, if weakly persons have been separated	32	87
TESTS	...	Special — ordinarily not required	23	62
"	...	Method to be followed in special cases	24	64
TEST WORKS	...	Importance of —	16	43
"	...	Management of —	17 and 18	44
"	...	Delay in conversion of — to regular relief works dangerous	19	49
			2	7
THRIFT	...	Importance of encouraging —	68	268
"	...	<i>Vide</i> Agricultural Banks.	109	354
TOOLS AND PLANT	...	Want of —	11	29
"	"	Reserves of — to be kept	ib.	ib.
VALEDICTORY DOLE	...	To be given on closure of gratuitous relief	51	156
			9	26
VILLAGE ACCOUNTANT	...	More control needed for — in Bombay	107	345
"	"	To be given an assistant, if necessary, in famine times	19	50
"	DOLES	Early preparation of lists necessary	15	41
"	"	" distribution of — necessary	19	51
"	"		ib.	52
"	"		45	135
"	"	Utilization of non-official agency for —	ib.	136
"	"	Cash preferable to grain dole	46	137

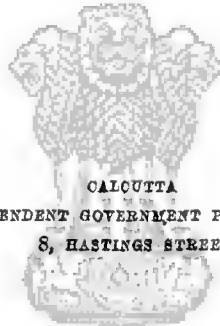
Subject.			Page.	Paragraph.
VILLAGE DOLES	...	Distribution of — at short intervals necessary ...	46	138
"	"	Doles preferable to kitchens ...	47	142
"	INSPECTION	Early organization of — necessary ...	15	41
"	"	Importance of — in connection with rains policy ...	19	50
"	"	" " the relief of aboriginal tribes ...	48	144
"	WORKS	Defined ...	53	162
"	"	Need of programmes of — ...	20	54
"	"	"	10	27
"	"	Advantages of — ...	22	58
"	"	"	21	56
"	"	Scope for — ...	ib.	57
"	"	Necessity for — as a reserve in the hot weather ...	72	214
"	"	Disadvantages of — ...	22	58
"	"	Full ordinary task to be required on — ...	21	57
"	"	Lower wage than on public works to be given on — ...	17	44
"	"	Daily payment not necessary on — ...	81	83
"	"	No relief to dependants on — ...	42	124
"	"	Selection for — permissible ...	33	91
"	"	The principle of the famine — ...	45	133
"	"	Lax views regarding the — ...	25	66
"	"	Different standards of — not required in different provinces ...	35	97
"	"	Scale of — should be judged by practical results ...	35	98
"	"	" of 1898 Commission excessive ...	36	101
"	"	Specially high for families ...	38	109
"	"	Sex distinction recommended ...	35	99
"	"	Scale of — recommended ...	36	100
"	"	Reasons for the scale of — recommended ...	37	103
"	"	Wages in Native States ...	ib.	105, 106
"	"	The scale of — recommended regarded as excessive in Native States ...	41	120
"	"	Conversion of rations to cash ...	39 to 41	110 to 118
"	"	More than the standard — not to be earned ...	36	102
"	"	Dangers of general reduction of — ...	55	168
"	"	Rest-day — ordinarily to be given, but may be dispensed with ...	41, 42	121 to 123
"	"	Deferred payment equivalent to a reduction of — ...	42	124
"	"	Village works to have a lower — ...	24	64
"	"	Penal — disappears under New Code System ...	30	80
"	"	"	41	118
"	"	"	33	90
"	"	"	42	124
"	"	"	41	119

Subject.				Page.	Paragraph
WANDERING	...	...	Meaning of different kinds of — ...	14	38
"	"	"	Of paupers a signal to be waited for ...	18	46
WATER-SUPPLY	...	...	Failure of — a peculiar difficulty of the famine ...	4	15
"	"	"	" one cause of immigration from Native States ...	53	164
"	"	"	" ...	54	167
"	"	"	Early action in regard to — necessary ...	15	41
"	"	"	Necessity for care in regard to — ...	58	179
"	"	"	Hospital Assistant to inspect — daily ...	57	173
"	"	"	Responsibility for — rests with Special Civil Officer	27	72
WEAKLY-GANGS	...	...	Importance of organizing — ...	24	64
"	"	"	Organization of — a condition of the New Code System ...	30	80
"	"	"	Separation of — a condition for varying tasks ...	32	87
"	"	"	Formation of — the duty of the Special Civil Officer	27	72
"	"	"	Inspecting Officers to pay special attention to — ...	30	80
"	"	"	Hospital Assistant to periodically inspect — ...	57	173
WEAVERS	...	...	Desirability of relieving — at their own trade ...	75	} 226to230
"	"	"	" ...	76	
"	"	"	Different systems of relief ...	77	231
WORKERS	...	...	Classification of — the duty of the Special Civil Officer ...	27	72
WORKING CHILDREN	"	"	Age limits of — ...	38	107
"	"	"	Wage of — ...	39	114
"	"	"	Inconvenience and disregard of the rule that — should not be fined ...	32	65
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